FIG.1

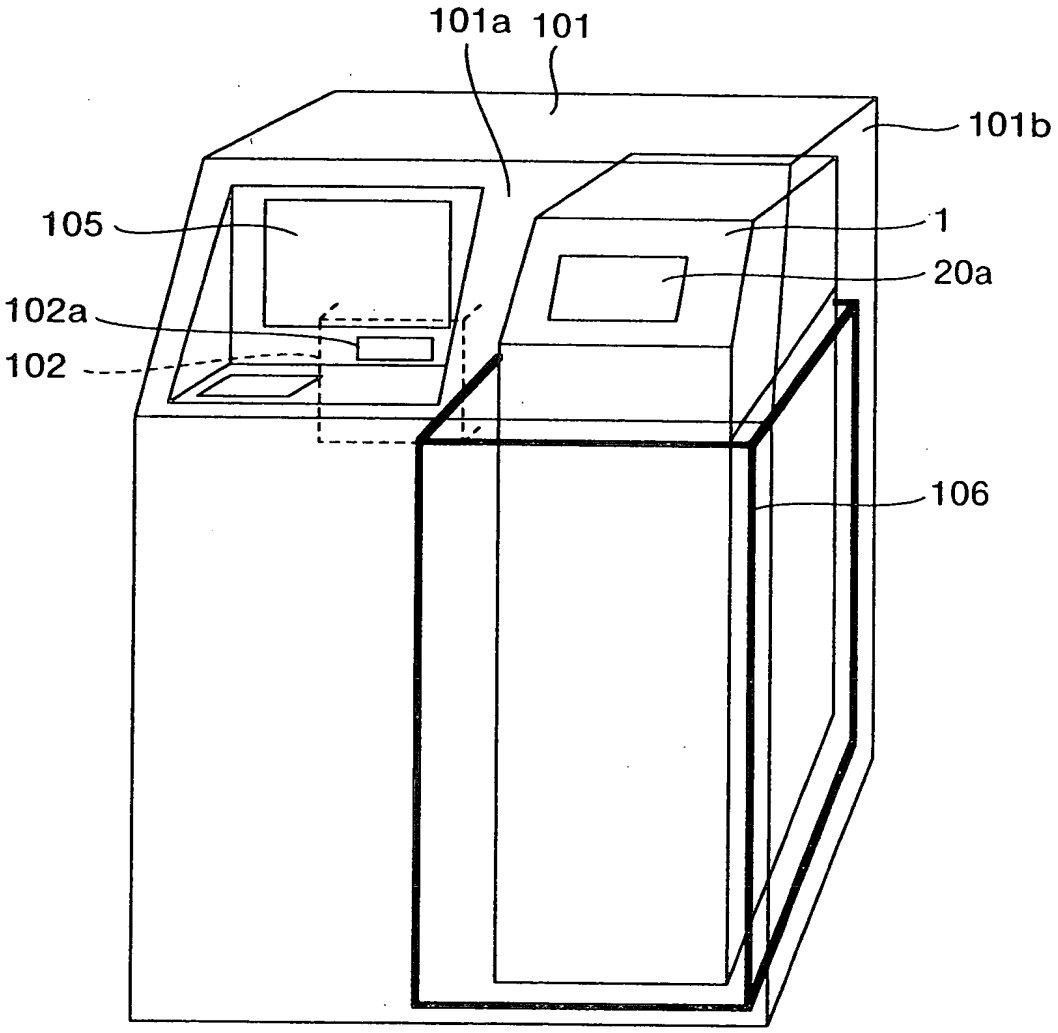


FIG.2

CONTROL BLOCK DIAGRAM OF AUTOMATED TELLER MACHINE 1

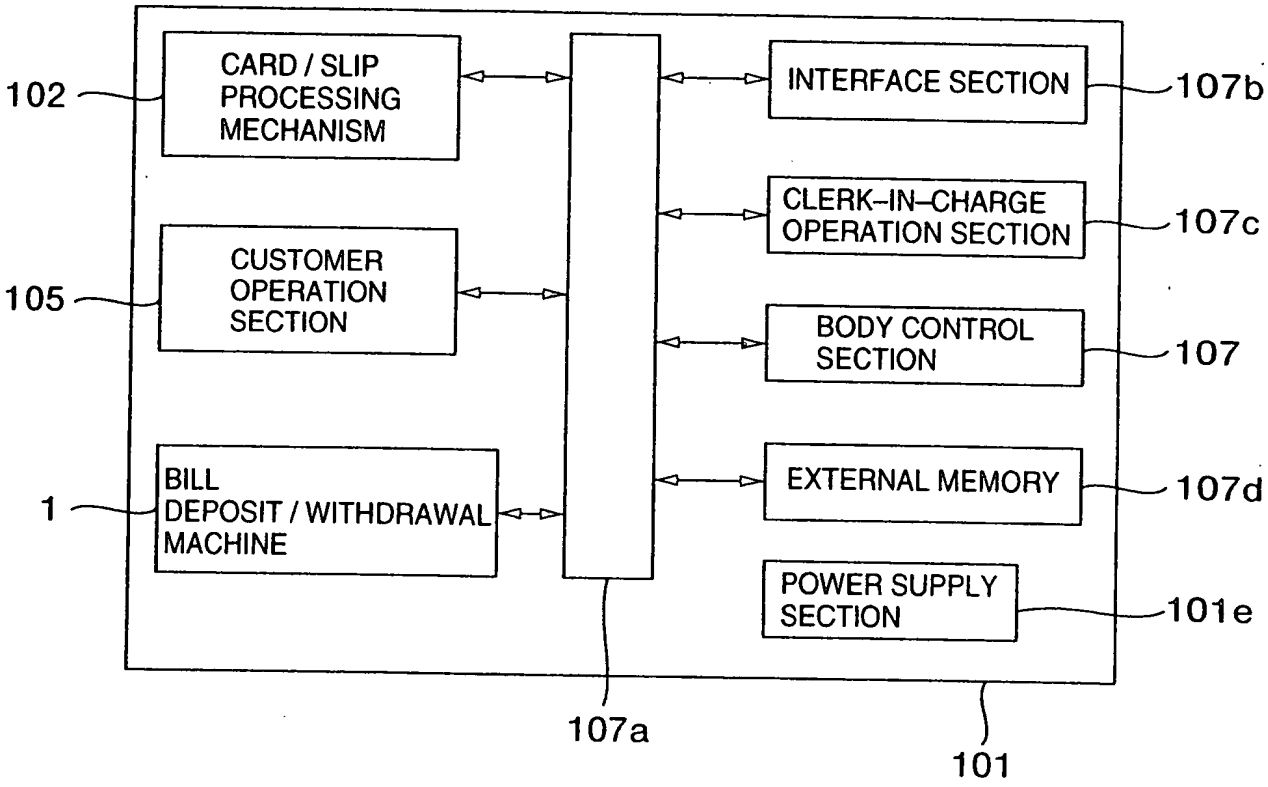


FIG.3

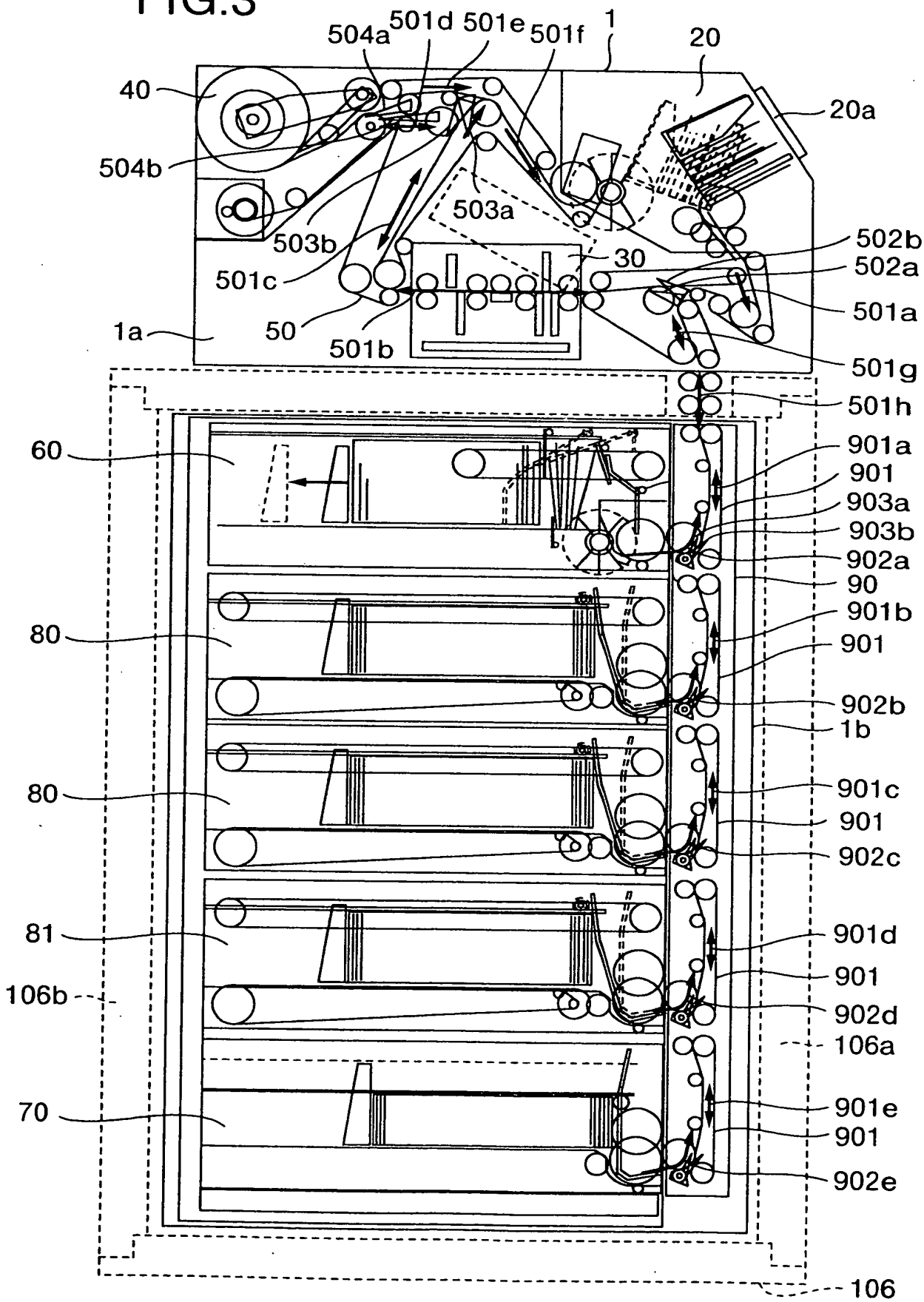

504a
501d
501e
501f
1
20
40
20a
504b
503a
503b
30
502b
501c
502a
50
501a
1a
501b
501g
501h
60
901a
901
903a
903b
902a
90
80
901b
901
902b
1b
80
901c
901
902c
81
901d
106b
901
902d
106a
70
901e
901
902e
106

FIG.4

CONTROL BLOCK DIAGRAM OF BILL DEPOSIT / WITHDRAWAL MACHINE 1

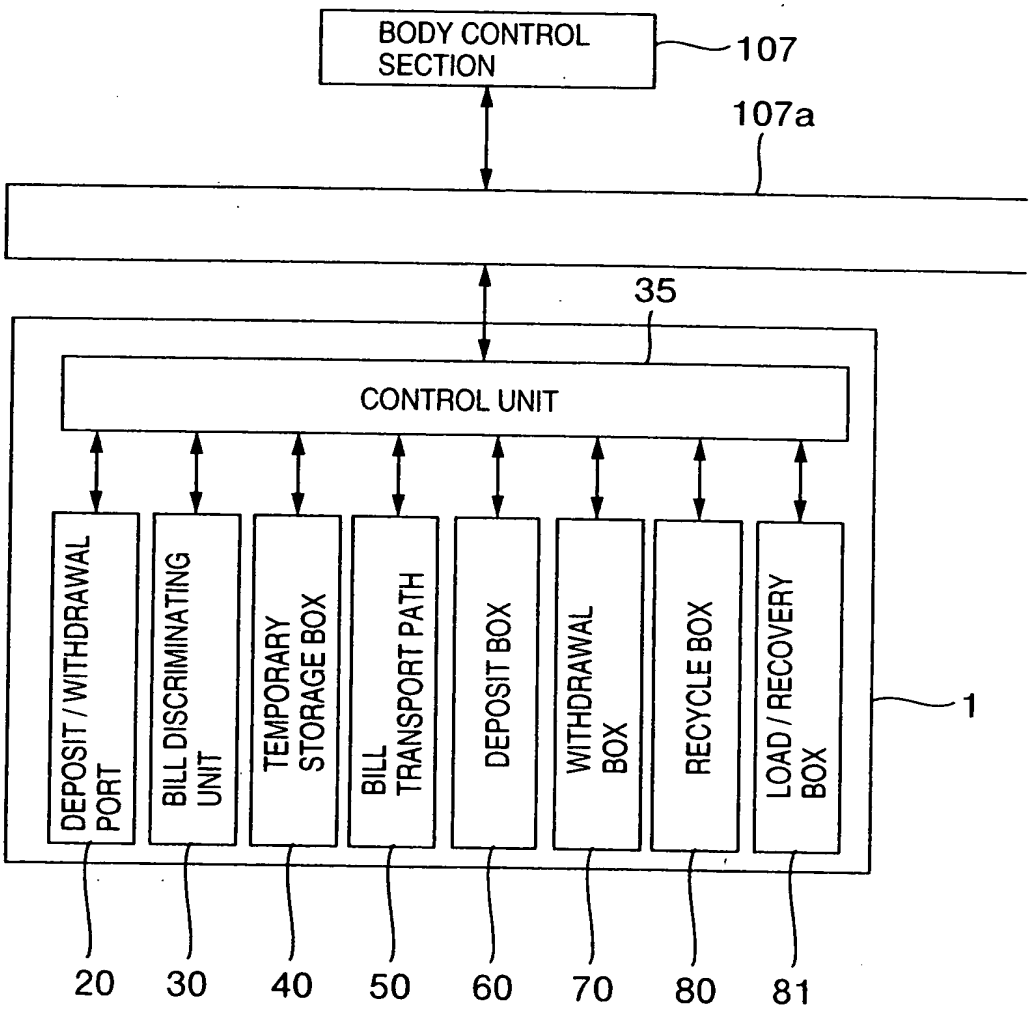


FIG.5A

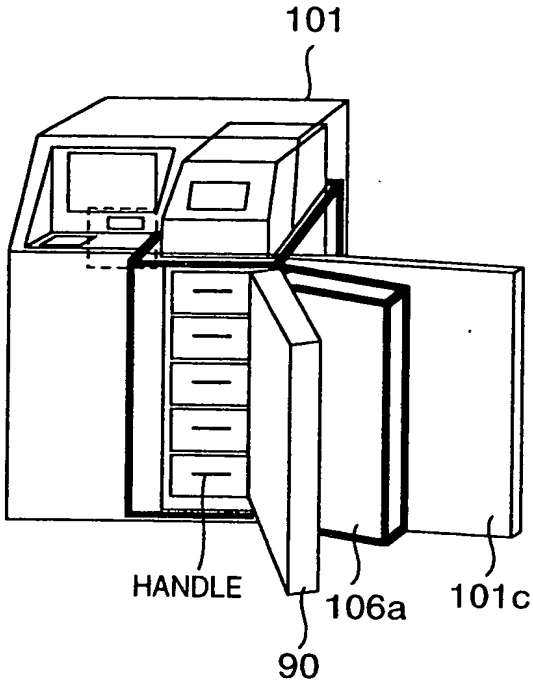


FIG.5B

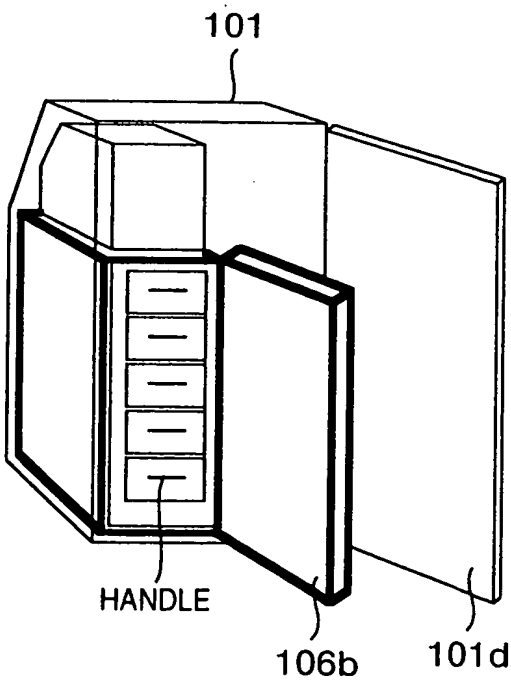


FIG.6

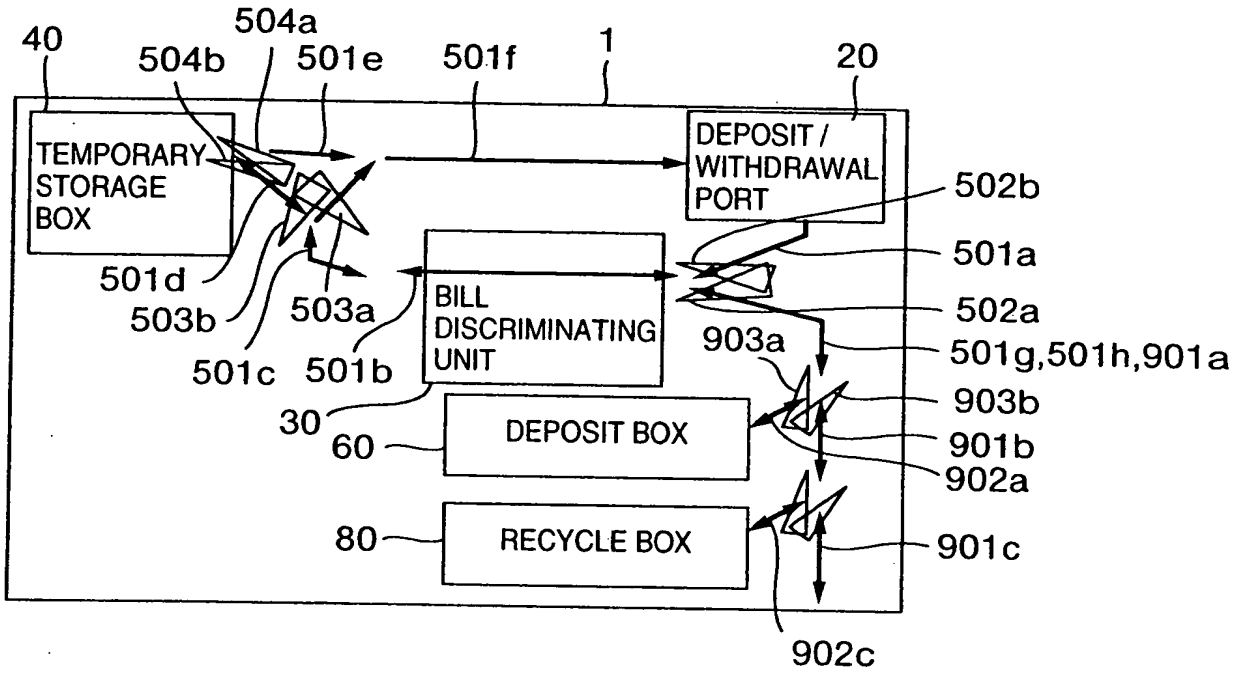

40
504a
504b
501e
501f
1
20
TEMPORARY STORAGE BOX
DEPOSIT / WITHDRAWAL PORT
502b
501a
501d
503b
503a
BILL DISCRIMINATING UNIT
502a
903a
501g,501h,901a
501c
501b
903b
30
60
DEPOSIT BOX
901b
902a
80
RECYCLE BOX
901c
902c

FIG.7

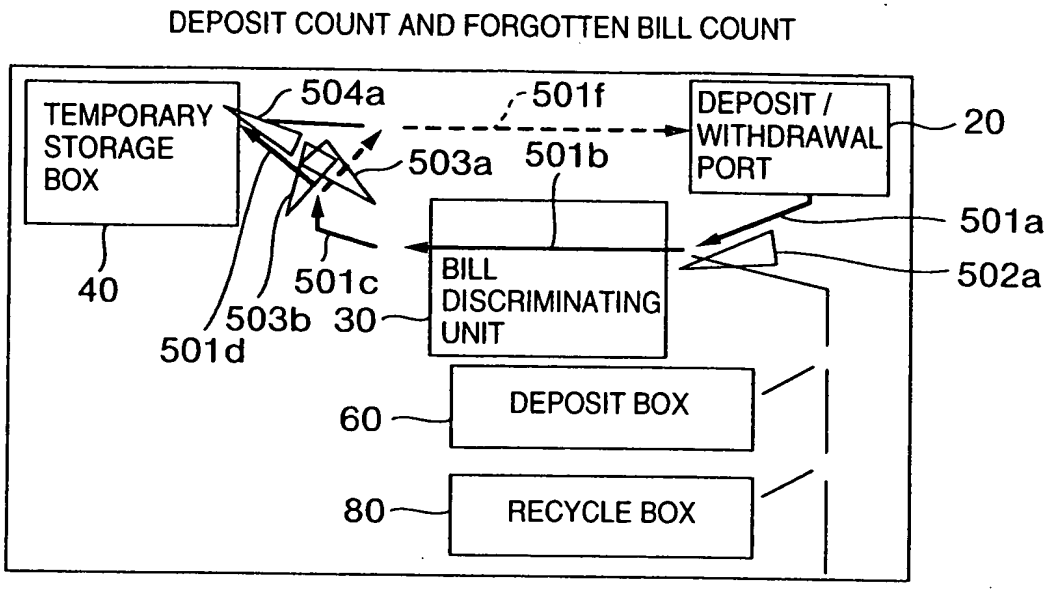

DEPOSIT COUNT AND FORGOTTEN BILL COUNT
TEMPORARY STORAGE BOX
504a
501f
DEPOSIT / WITHDRAWAL PORT
20
503a
501b
501a
502a
40
501c
BILL DISCRIMINATING UNIT
503b
30
501d
60
DEPOSIT BOX
80
RECYCLE BOX

FIG.8

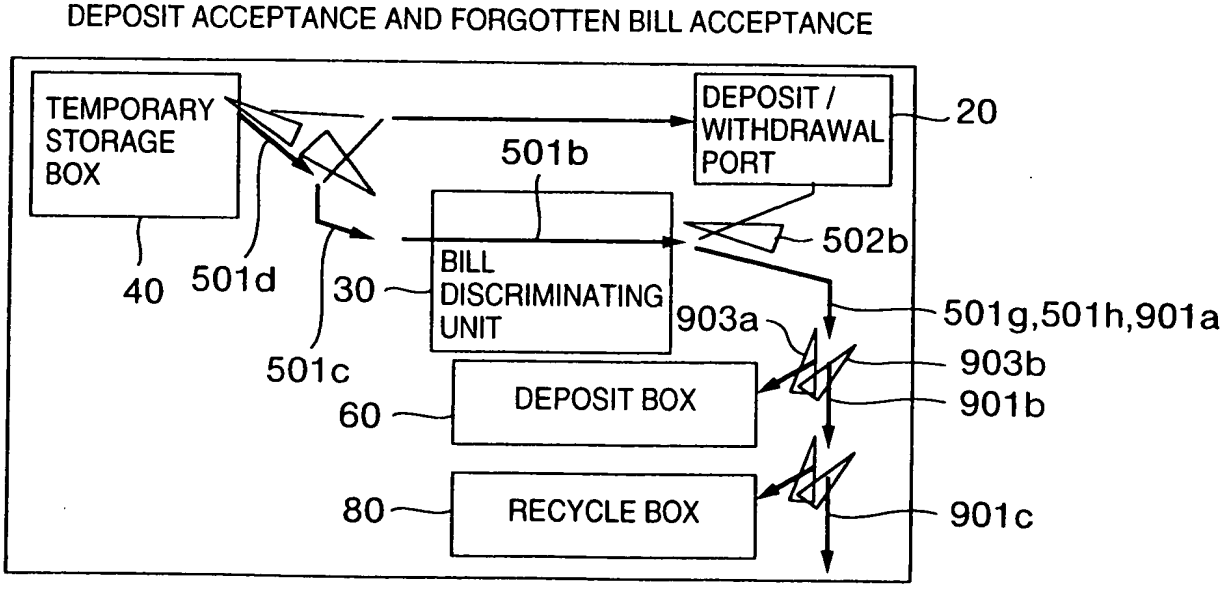

DEPOSIT ACCEPTANCE AND FORGOTTEN BILL ACCEPTANCE
TEMPORARY STORAGE BOX
DEPOSIT / WITHDRAWAL PORT
20
501b
502b
40
501d
30
BILL DISCRIMINATING UNIT
903a
501g,501h,901a
903b
501c
901b
60
DEPOSIT BOX
80
RECYCLE BOX
901c

FIG.9

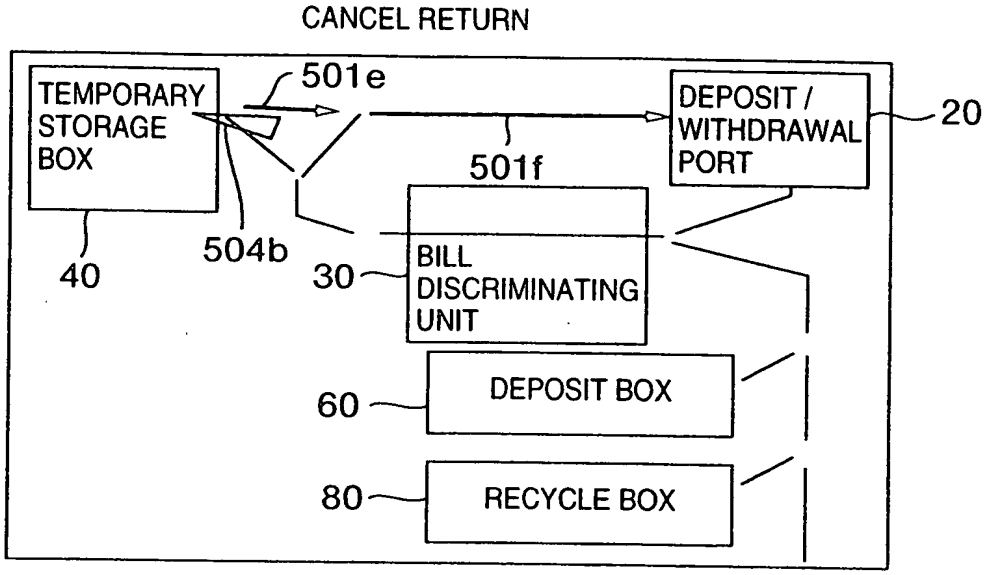

CANCEL RETURN
TEMPORARY STORAGE BOX
501e
DEPOSIT / WITHDRAWAL PORT
20
501f
504b
40
30
BILL DISCRIMINATING UNIT
60
DEPOSIT BOX
80
RECYCLE BOX

FIG.10

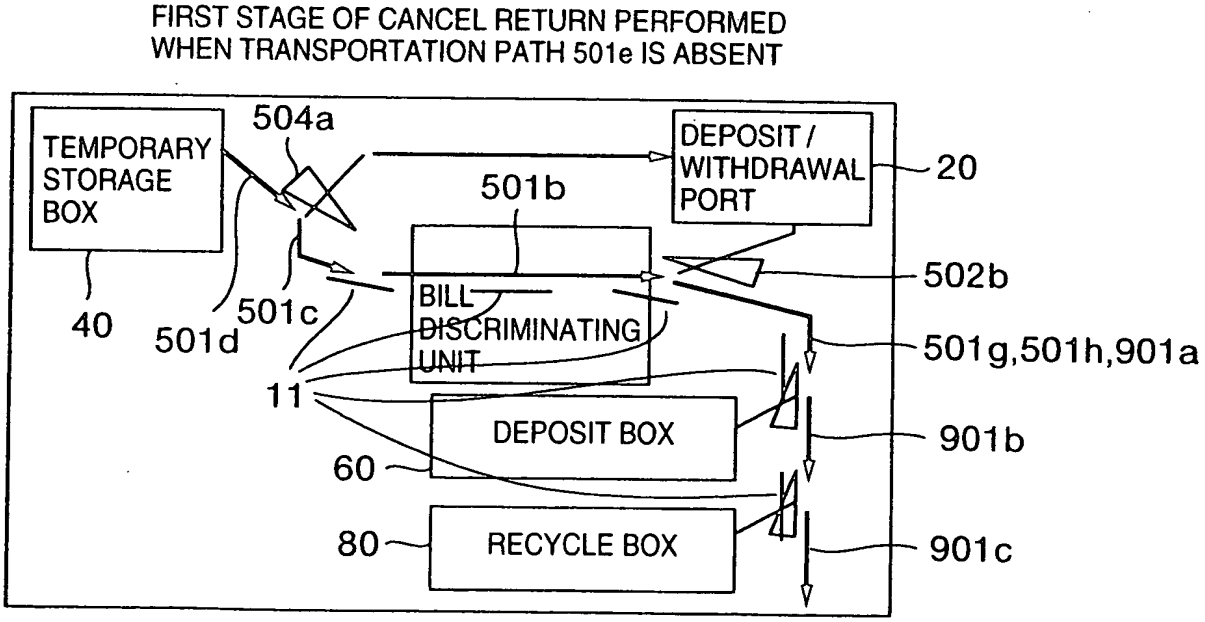

FIRST STAGE OF CANCEL RETURN PERFORMED WHEN TRANSPORTATION PATH 501e IS ABSENT
TEMPORARY STORAGE BOX
504a
DEPOSIT / WITHDRAWAL PORT
20
501b
502b
40
501d
501c
BILL DISCRIMINATING UNIT
501g,501h,901a
11
DEPOSIT BOX
901b
60
80
RECYCLE BOX
901c

FIG.11

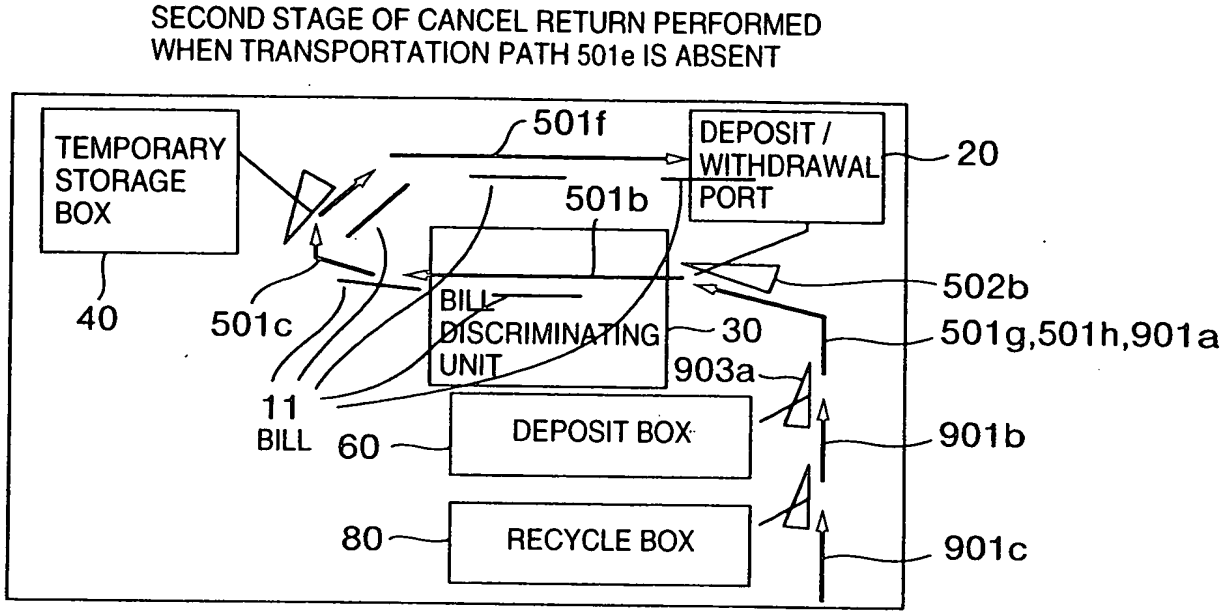

SECOND STAGE OF CANCEL RETURN PERFORMED
WHEN TRANSPORTATION PATH 501e IS ABSENT
TEMPORARY STORAGE BOX
40
501f
DEPOSIT / WITHDRAWAL PORT
20
501b
502b
501c
BILL DISCRIMINATING UNIT
30
501g,501h,901a
903a
11 BILL
60
DEPOSIT BOX
901b
80
RECYCLE BOX
901c

FIG.12

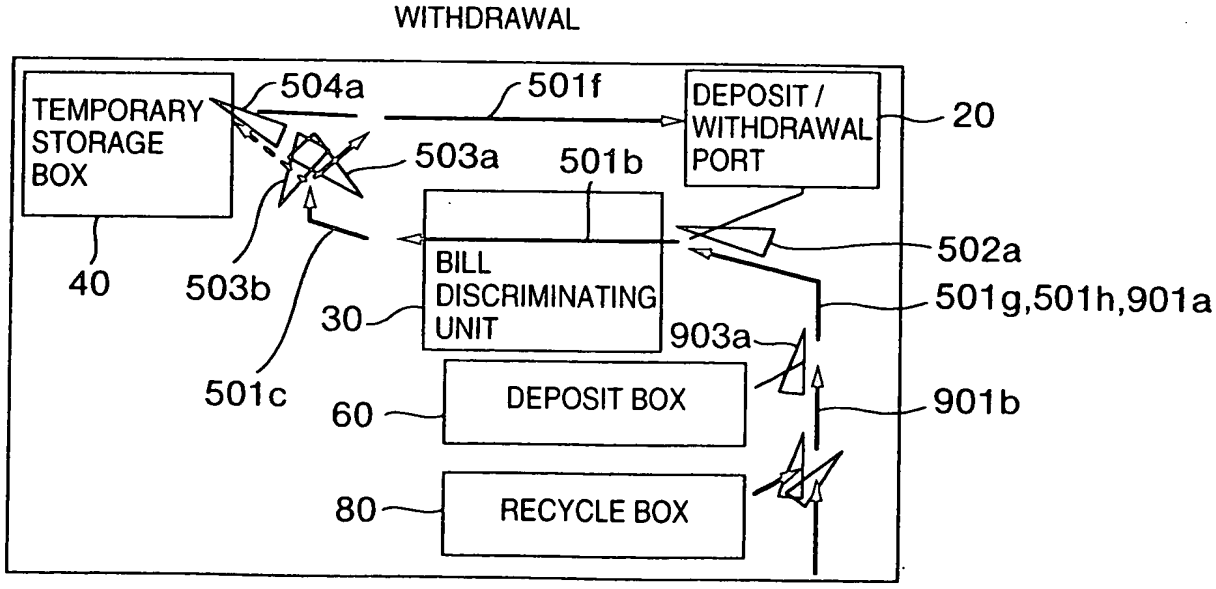

WITHDRAWAL
TEMPORARY STORAGE BOX
40
504a
501f
DEPOSIT / WITHDRAWAL PORT
20
503a
501b
503b
502a
BILL DISCRIMINATING UNIT
30
501g,501h,901a
903a
501c
60
DEPOSIT BOX
901b
80
RECYCLE BOX

FIG.13

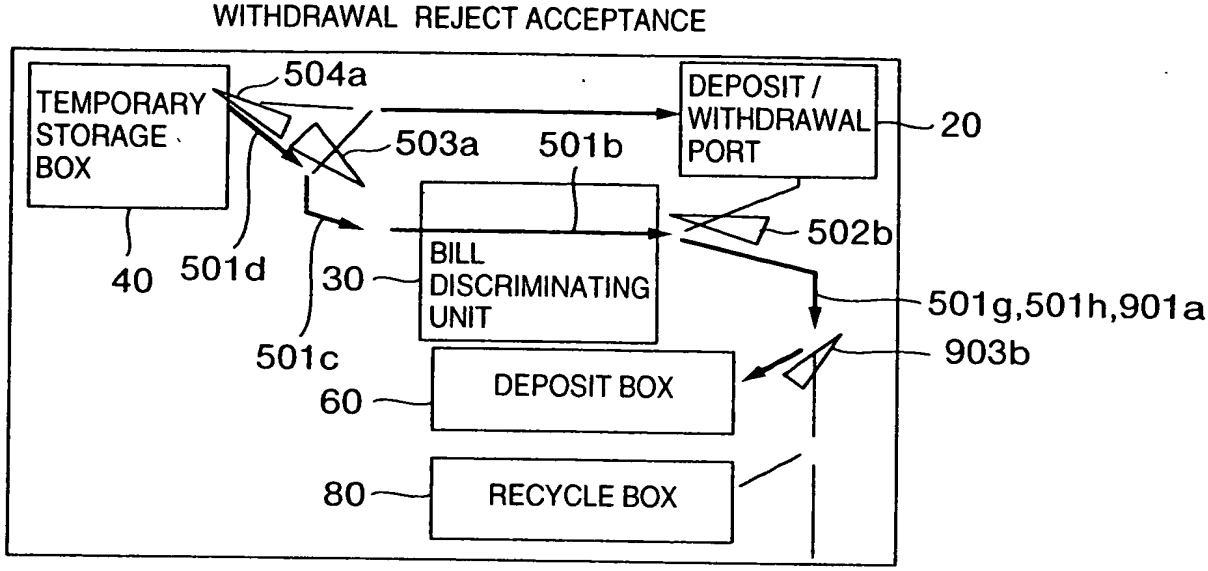

WITHDRAWAL REJECT ACCEPTANCE
TEMPORARY STORAGE BOX
504a
503a
501b
DEPOSIT / WITHDRAWAL PORT
20
502b
40
501d
30
BILL DISCRIMINATING UNIT
501g,501h,901a
501c
903b
60
DEPOSIT BOX
80
RECYCLE BOX

FIG.14

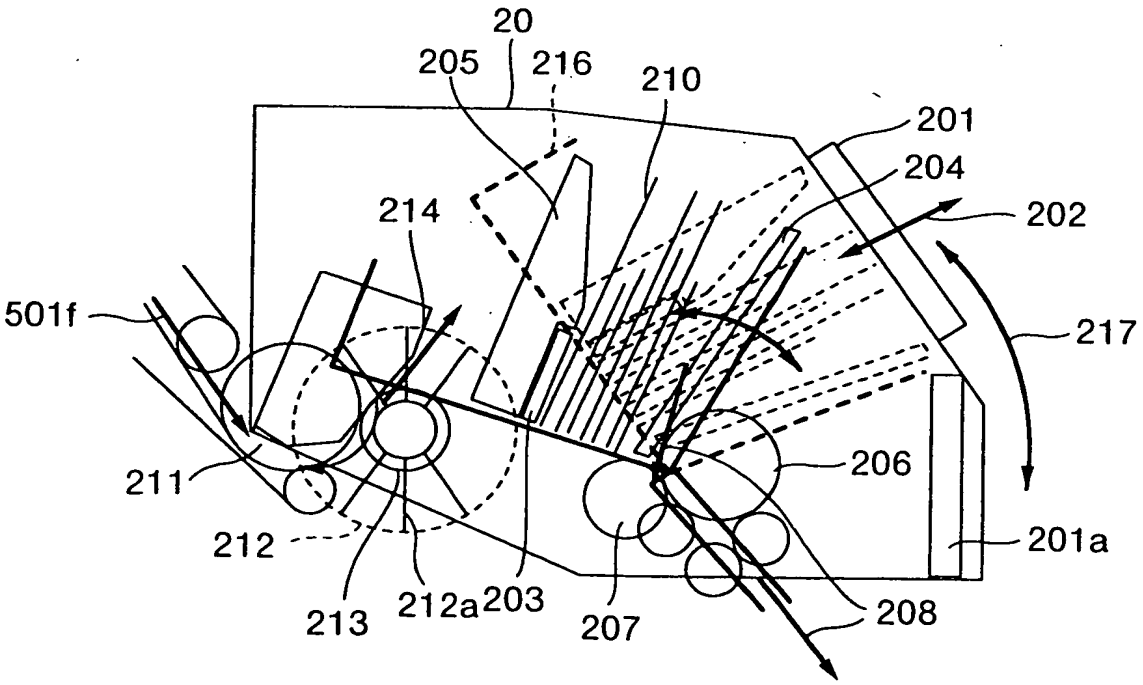

20
205
216
210
201
204
214
202
501f
217
206
211
201a
212
213
212a
203
207
208

FIG.15

DEPOSIT

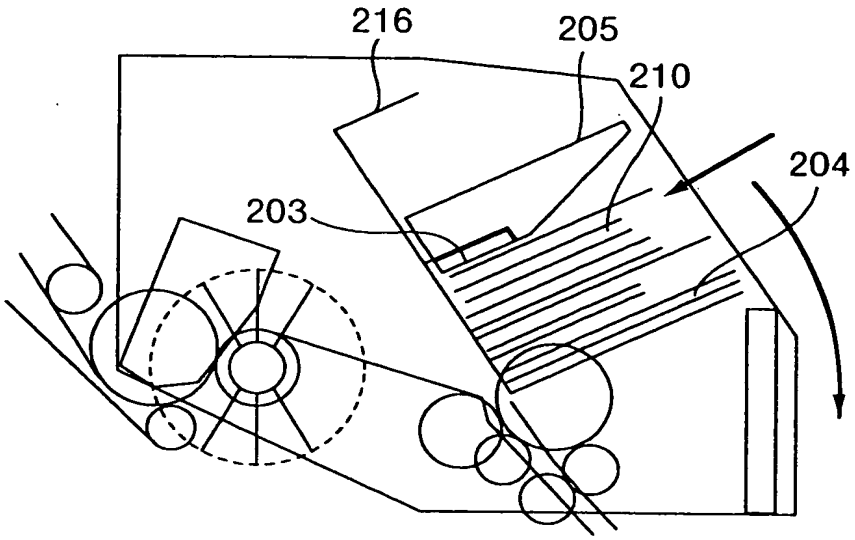


FIG.16

DELIVERY OPERATION

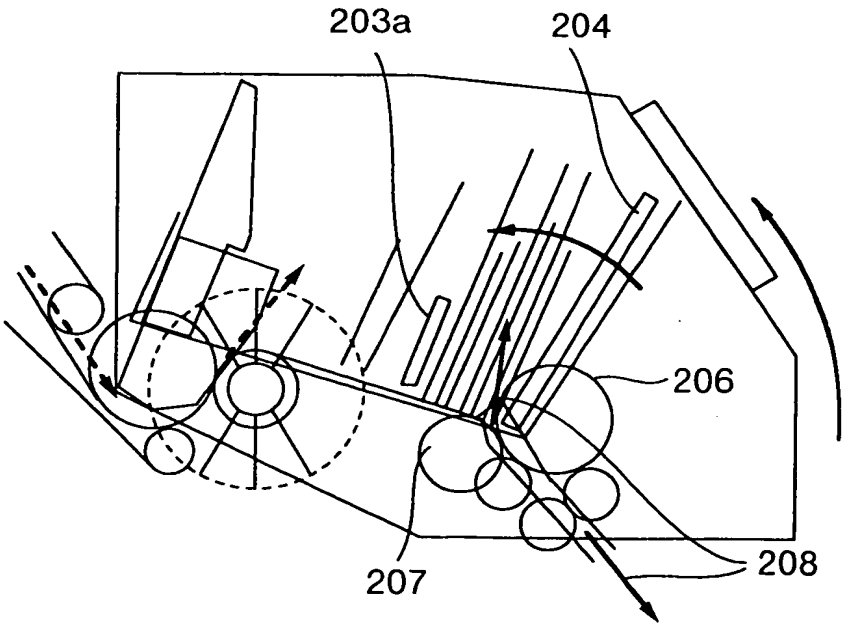


FIG.17

ACCEPTING OPERATION

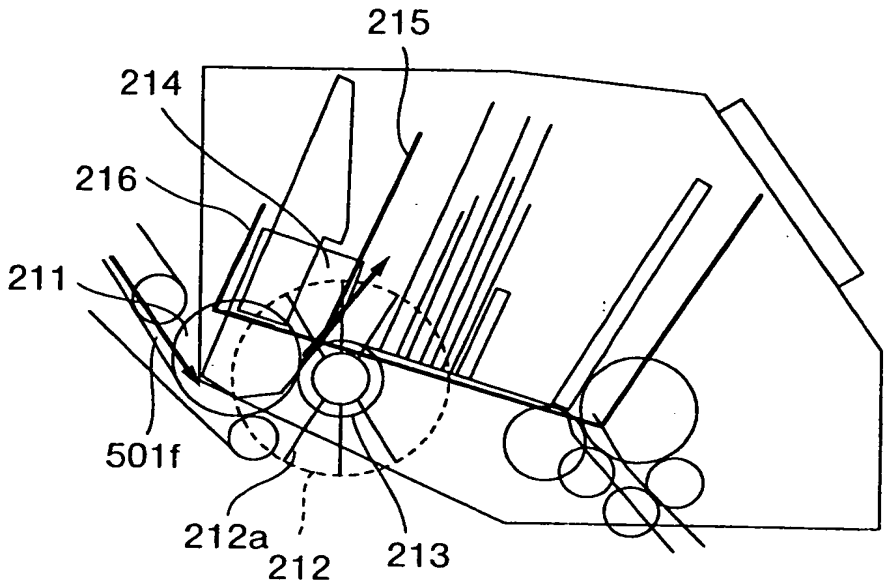


FIG.18

DEPOSIT

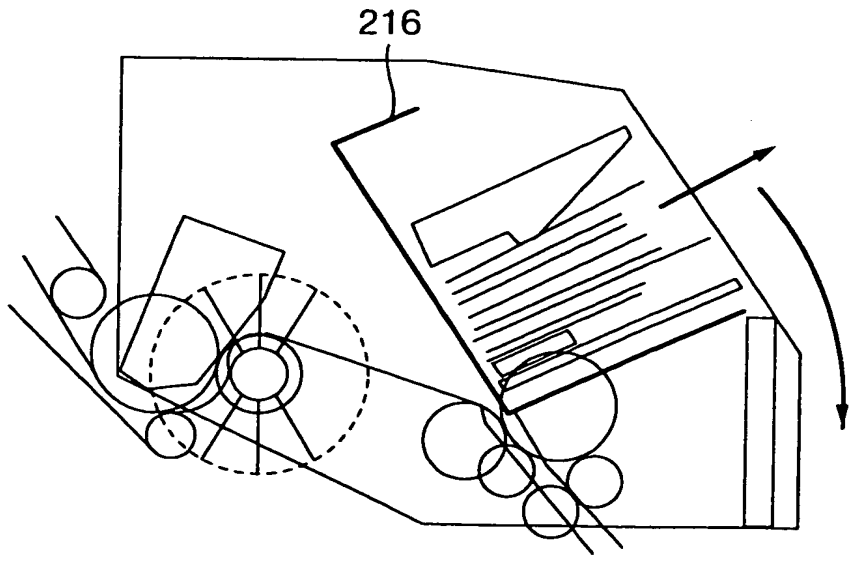


FIG.19

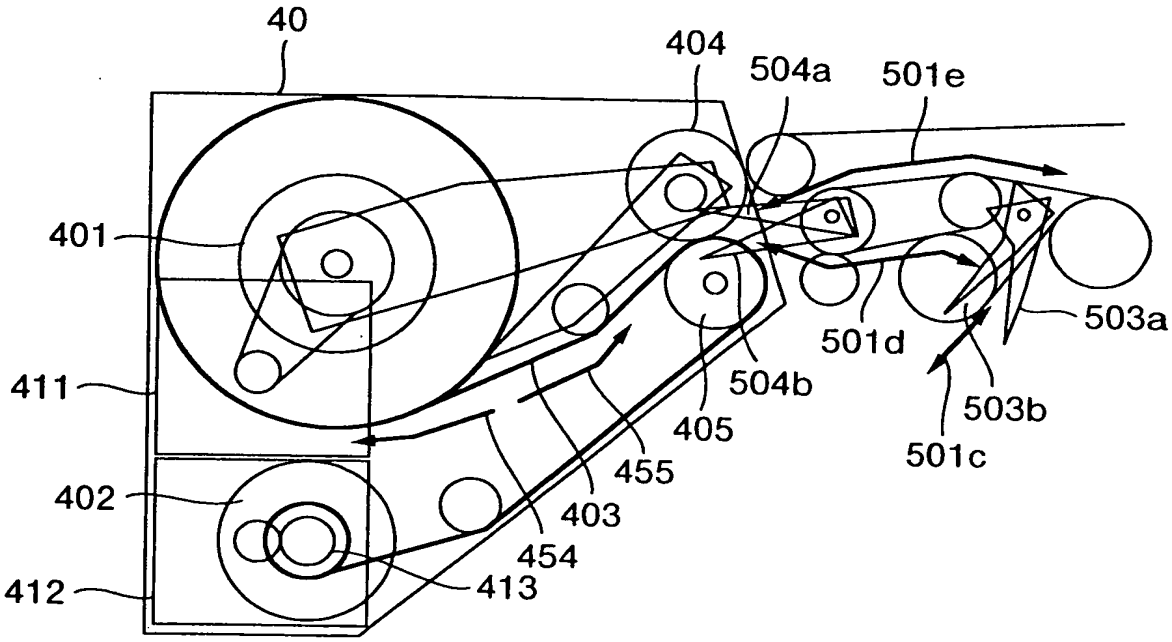

40
404
504a
501e
401
503a
501d
411
504b
503b
405
501c
455
402
403
454
412
413

FIG.20

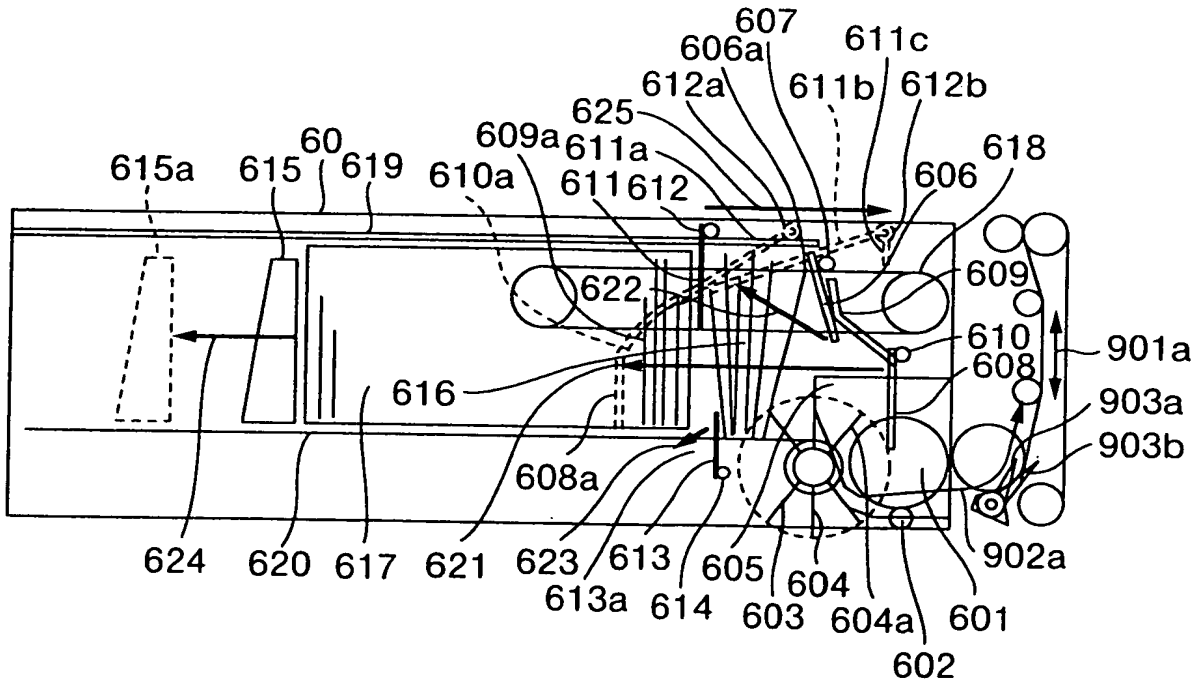

607
606a
611c
612a
611b
612b
625
609a
611a
618
60
615a
615
619
610a
611
612
606
622
609
610
901a
608
616
903a
903b
608a
624
620
617
621
623
613
605
902a
613a
614
603
604
604a
601
602

FIG.21

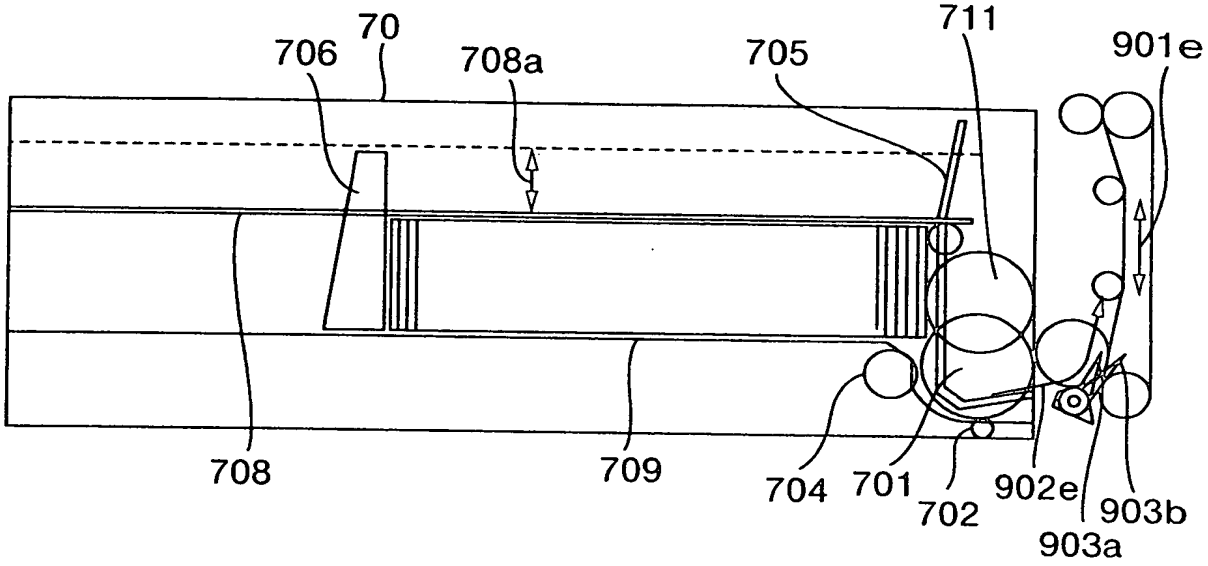

706
70
708a
705
711
901e
708
709
704
701
702
902e
903b
903a

FIG.22

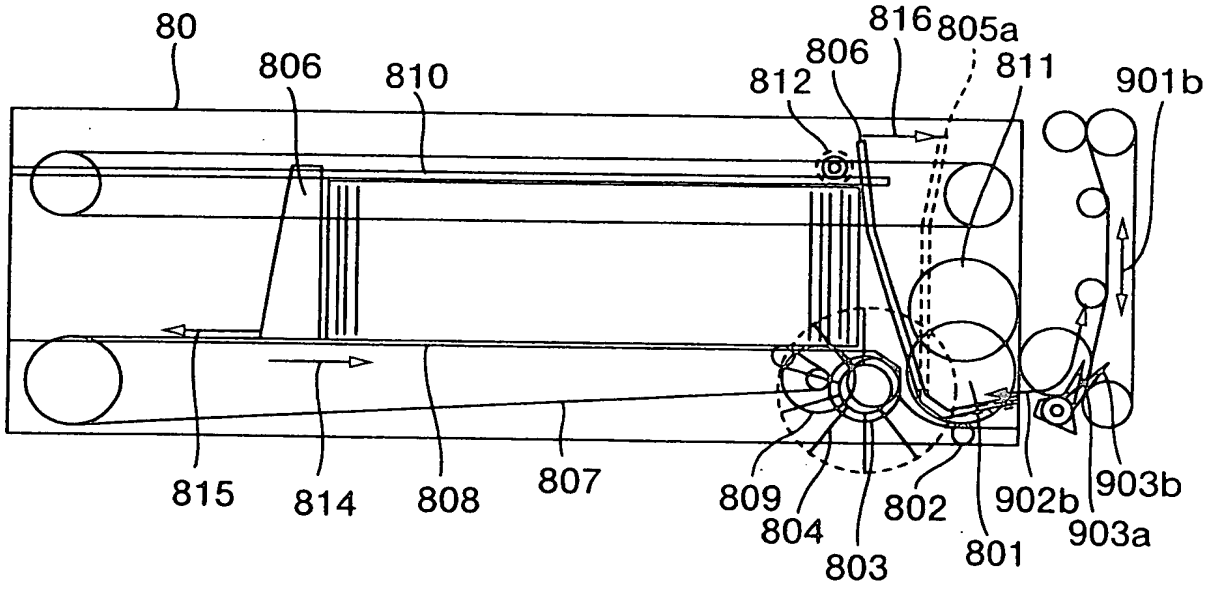

80
806
810
816
805a
806
812
811
901b
815
814
808
807
809
804
803
802
801
902b
903b
903a

FIG.23

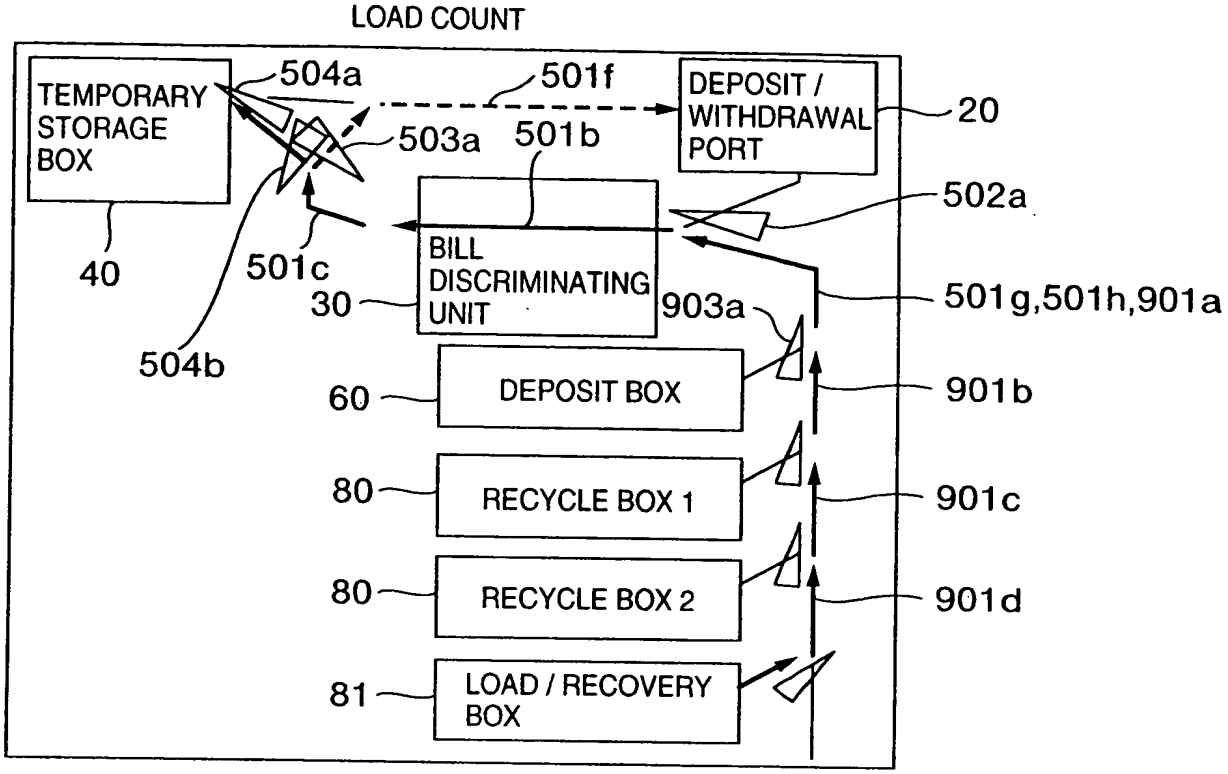

LOAD COUNT
TEMPORARY STORAGE BOX
504a
501f
DEPOSIT / WITHDRAWAL PORT
20
503a
501b
502a
40
501c
BILL DISCRIMINATING UNIT
30
903a
501g,501h,901a
504b
60
DEPOSIT BOX
901b
80
RECYCLE BOX 1
901c
80
RECYCLE BOX 2
901d
81
LOAD / RECOVERY BOX

FIG.24

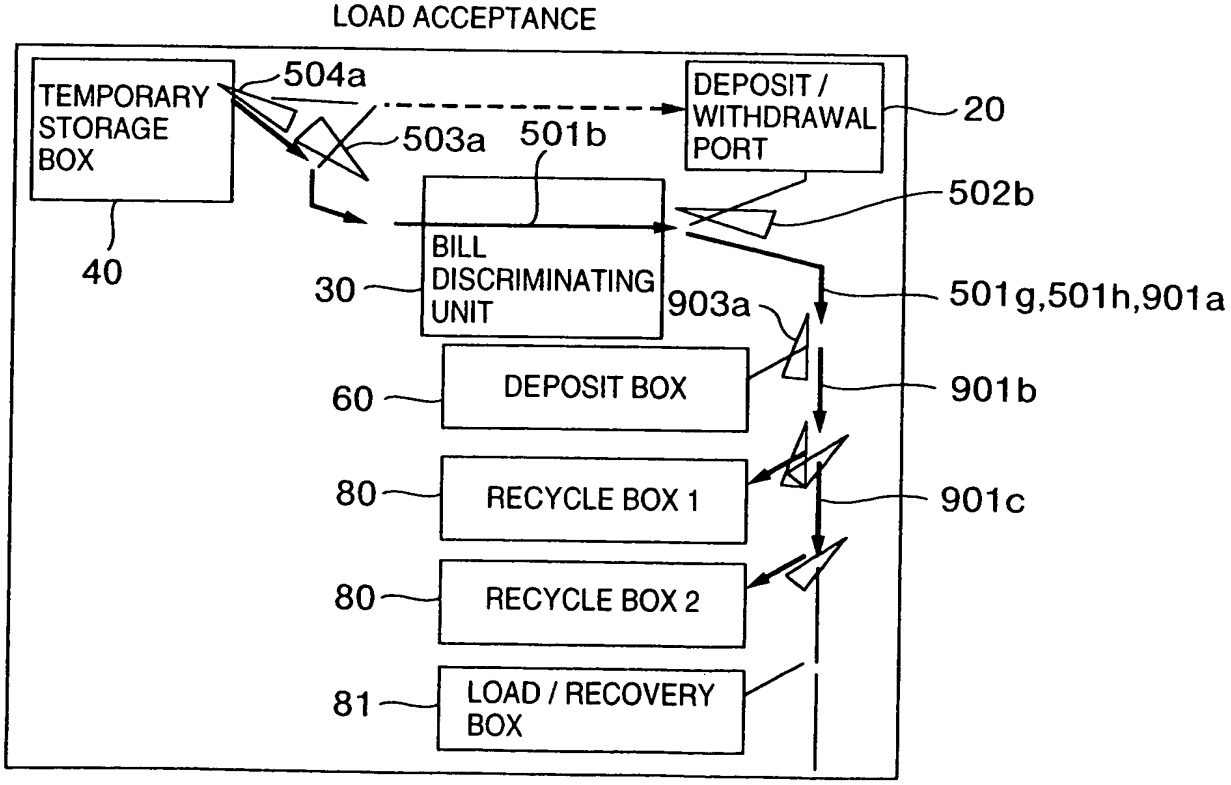

LOAD ACCEPTANCE
TEMPORARY STORAGE BOX
504a
DEPOSIT / WITHDRAWAL PORT
20
503a
501b
502b
40
BILL DISCRIMINATING UNIT
30
903a
501g,501h,901a
60
DEPOSIT BOX
901b
80
RECYCLE BOX 1
901c
80
RECYCLE BOX 2
81
LOAD / RECOVERY BOX

FIG.25

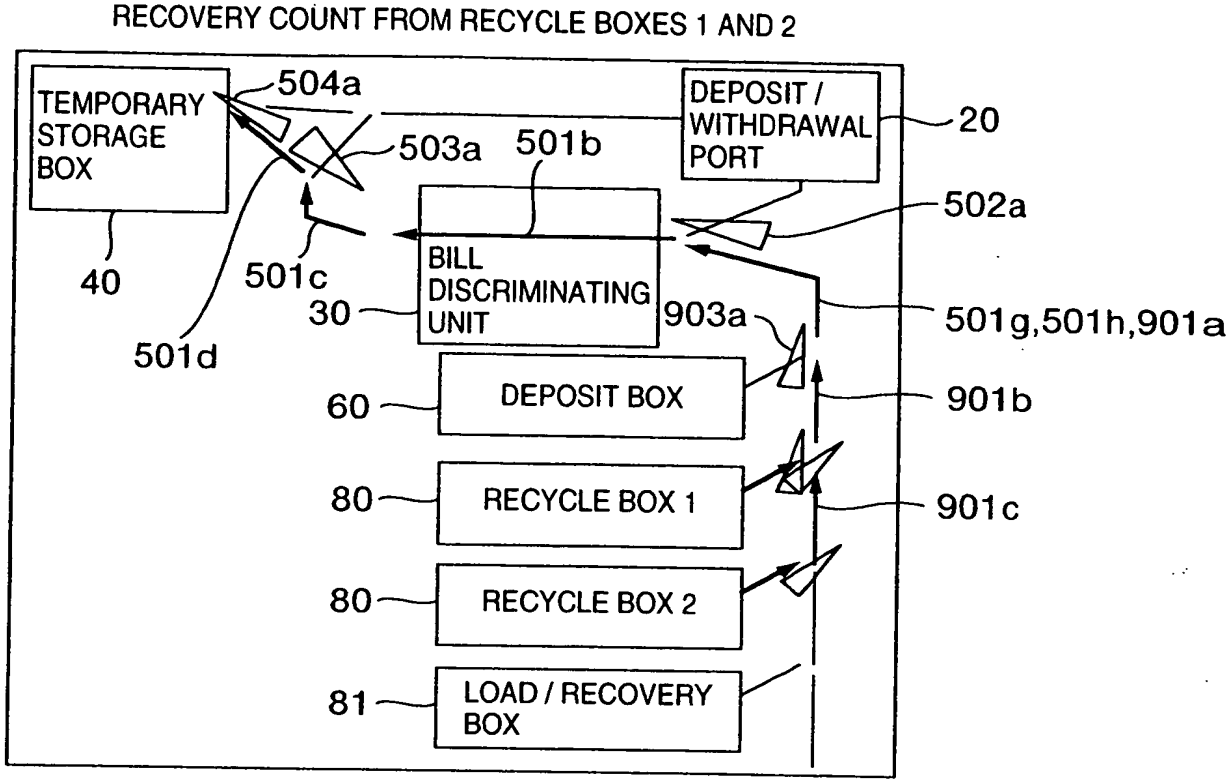

RECOVERY COUNT FROM RECYCLE BOXES 1 AND 2
TEMPORARY STORAGE BOX
504a
503a
501b
DEPOSIT / WITHDRAWAL PORT
20
502a
40
501c
BILL DISCRIMINATING UNIT
30
903a
501g,501h,901a
501d
60
DEPOSIT BOX
901b
80
RECYCLE BOX 1
901c
80
RECYCLE BOX 2
81
LOAD / RECOVERY BOX

FIG.26

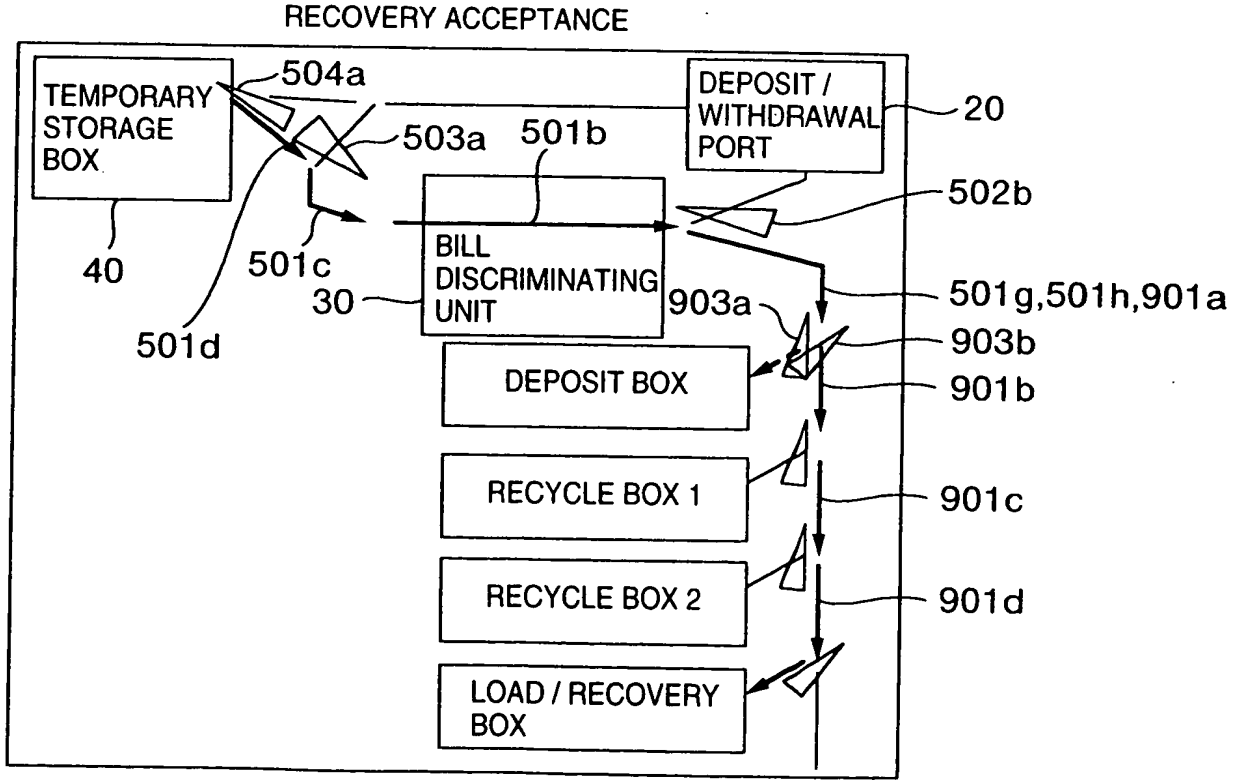

RECOVERY ACCEPTANCE
TEMPORARY STORAGE BOX
504a
503a
501b
DEPOSIT / WITHDRAWAL PORT
20
502b
40
501c
BILL DISCRIMINATING UNIT
30
903a
501g,501h,901a
501d
903b
DEPOSIT BOX
901b
RECYCLE BOX 1
901c
RECYCLE BOX 2
901d
LOAD / RECOVERY BOX

FIG.27

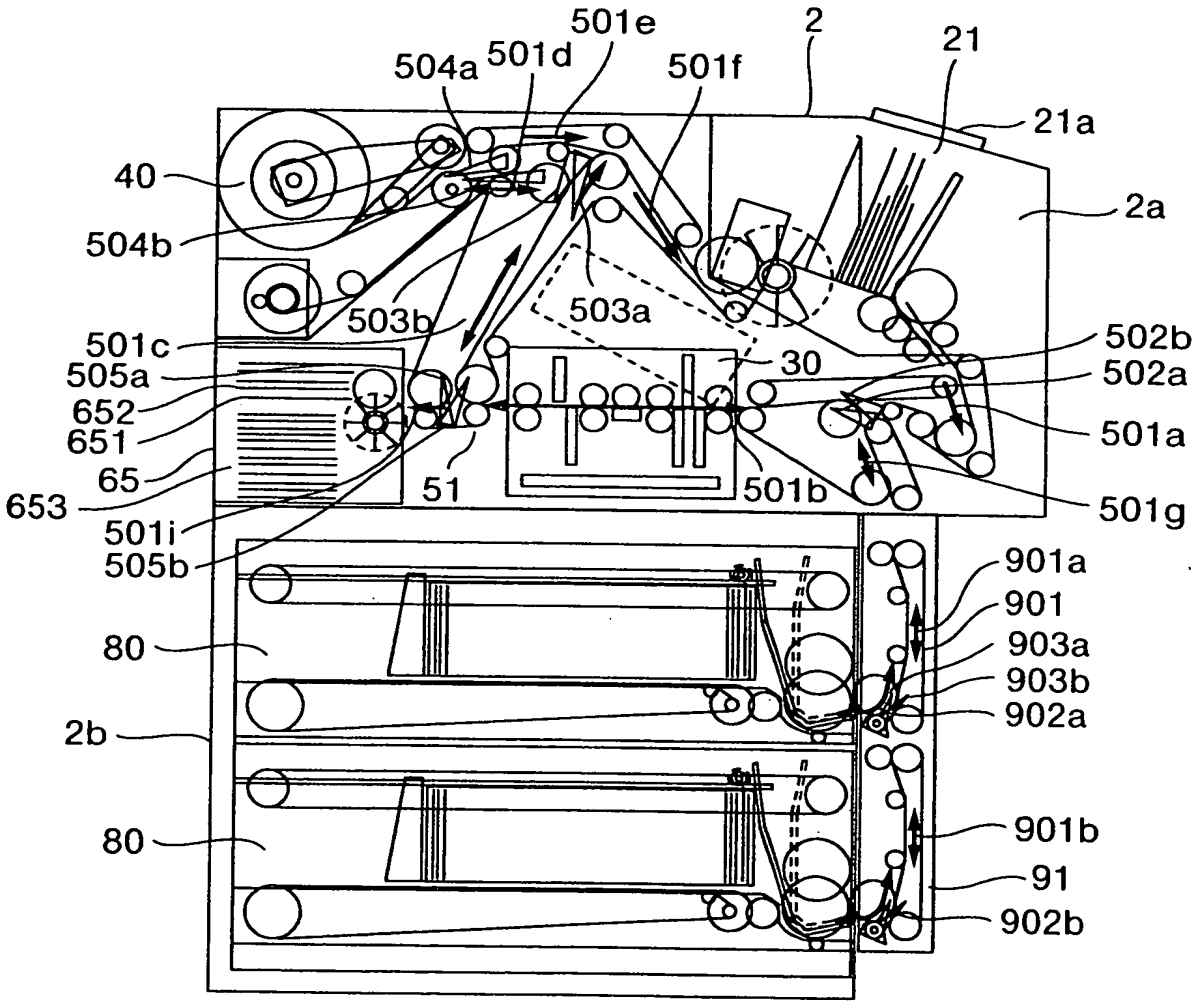

501e
2
21
504a
501d
501f
21a
40
2a
504b
503b
503a
501c
30
502b
505a
502a
652
651
501a
65
51
501b
653
501g
501i
505b
901a
901
80
903a
903b
902a
2b
80
901b
91
902b

FIG.28

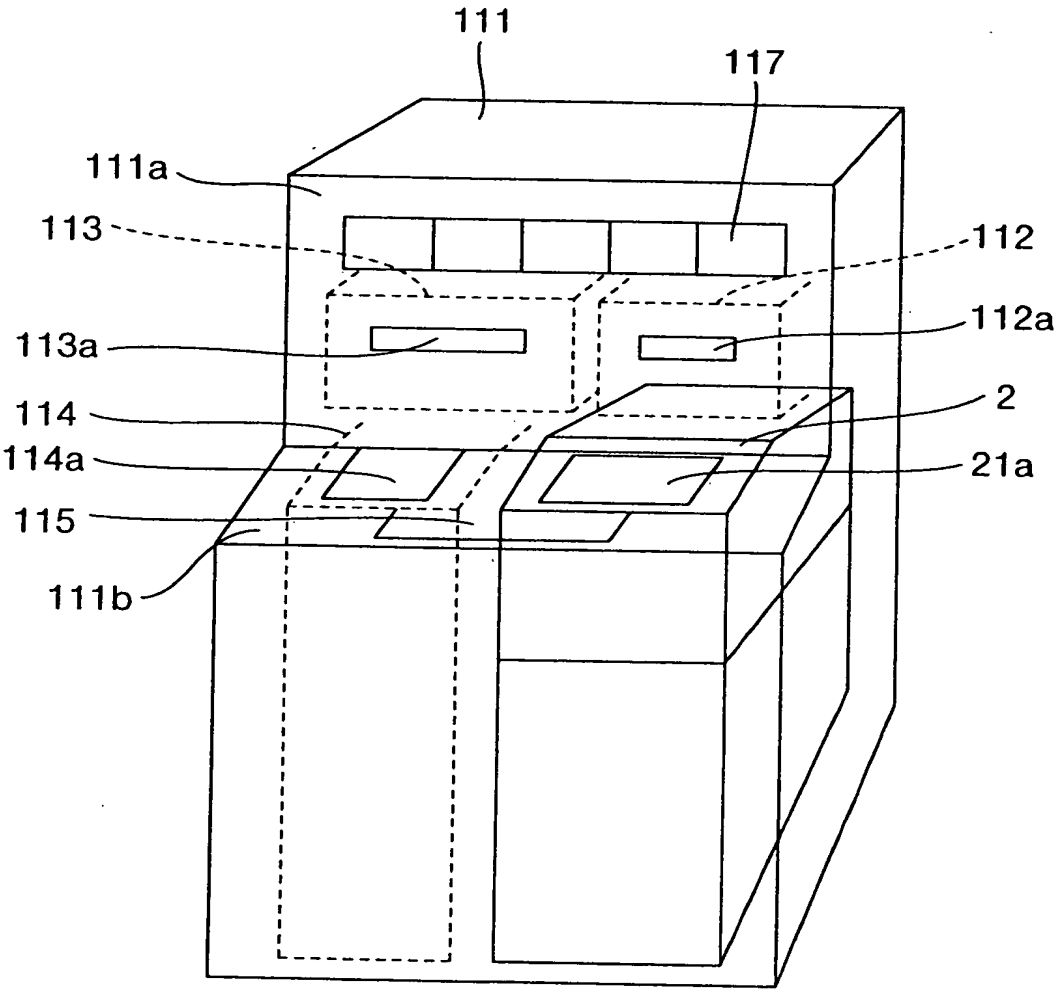


FIG.29A

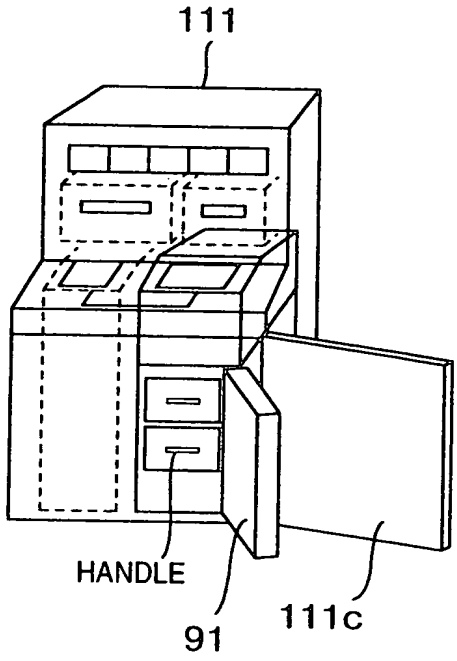


FIG.29B

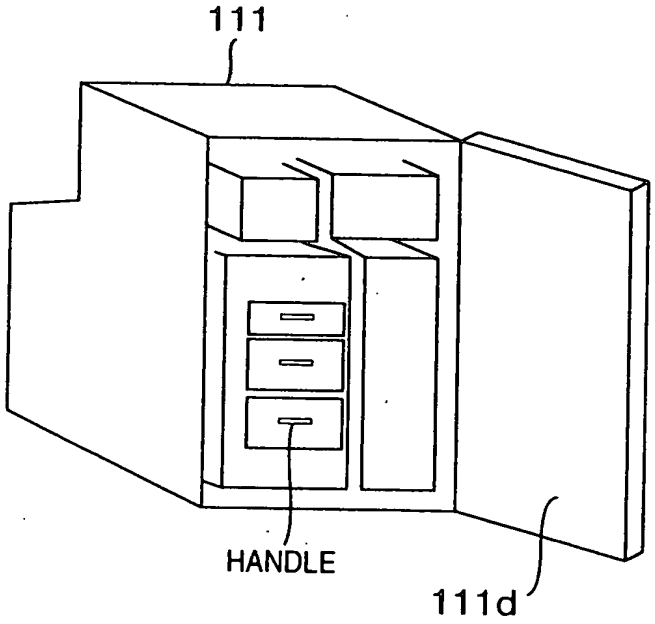


FIG.30A

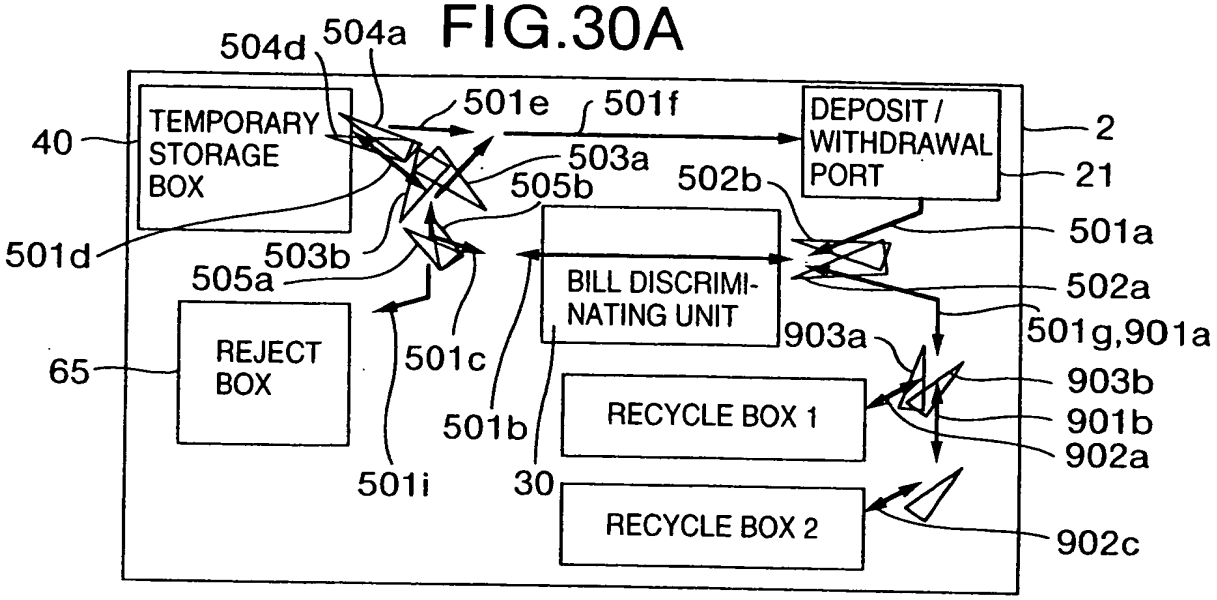


FIG.30B

DEPOSIT ACCEPTANCE AND FORGOTTEN BILL ACCEPTANCE

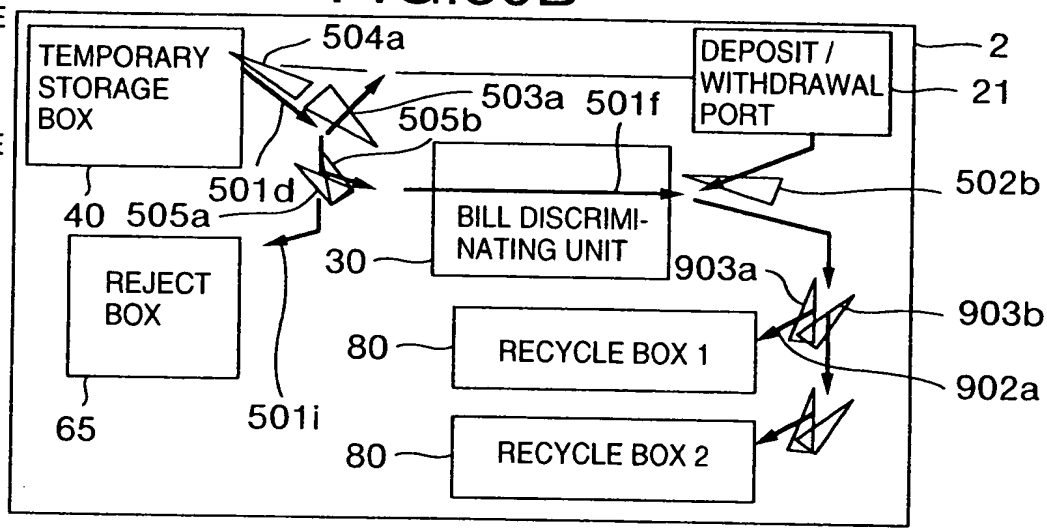


FIG.30C

WITHDRAEAL REJECT ACCEPTANCE

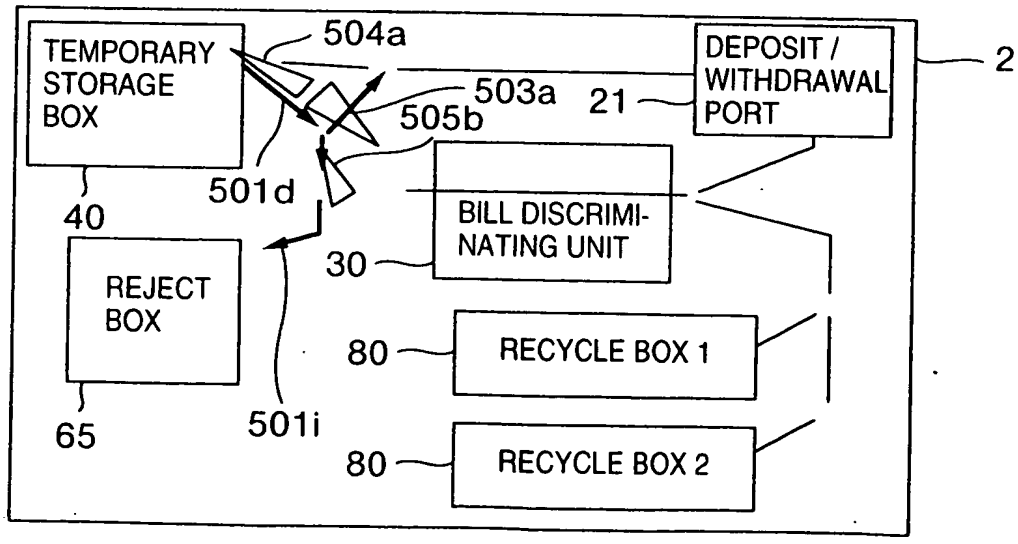


FIG.31

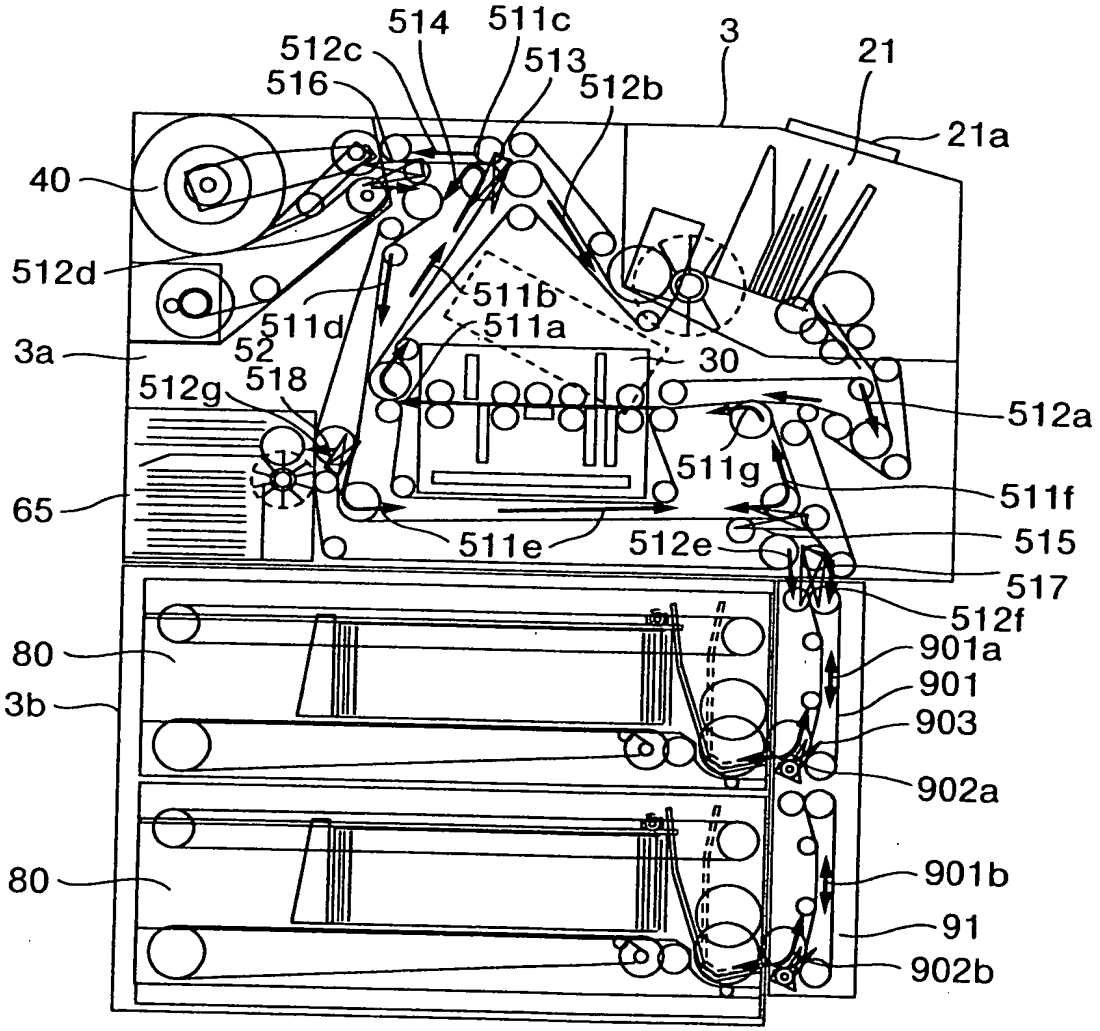

514
511c
512c
513
3
21
516
512b
21a
40
512d
511b
511d
511a
52
3a
30
518
512g
512a
511g
65
511f
511e
512e
515
517
512f
80
901a
3b
901
903
902a
80
901b
91
902b

FIG.32

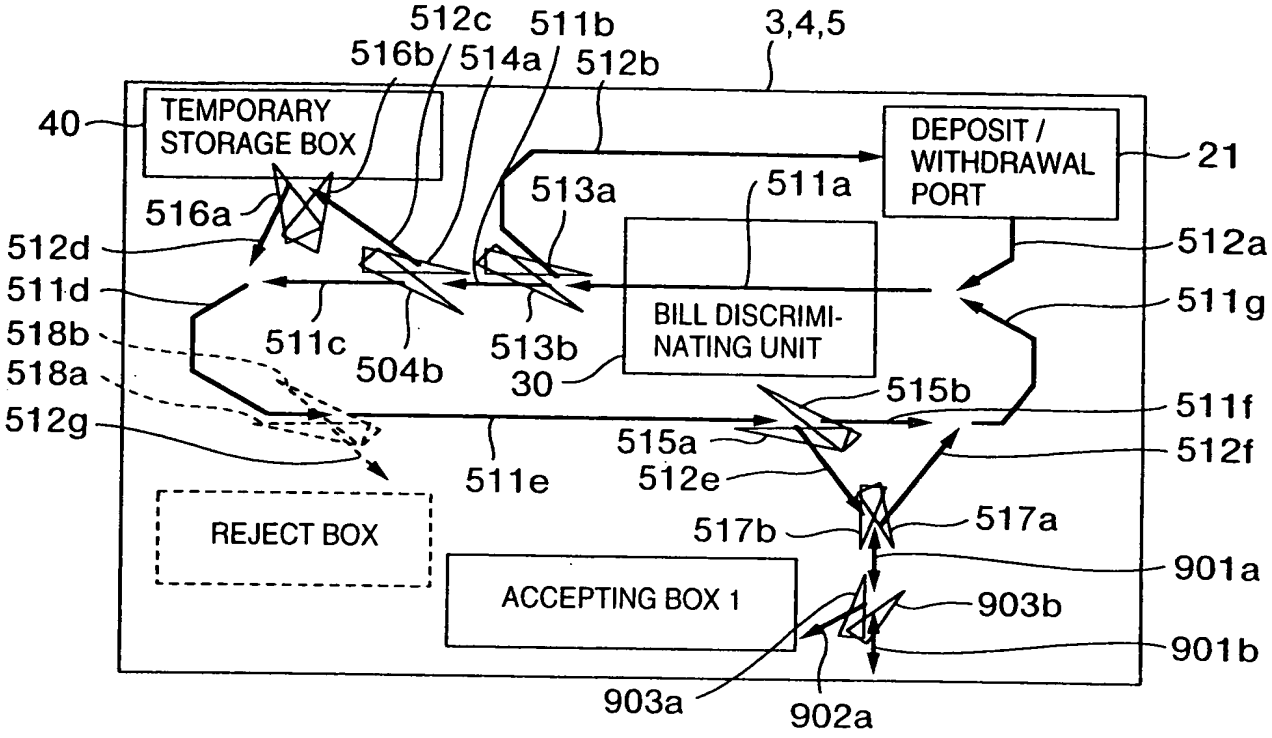

512c
511b
3,4,5
516b
514a
512b
40
TEMPORARY STORAGE BOX
DEPOSIT / WITHDRAWAL PORT
21
516a
513a
511a
512d
512a
511d
511g
BILL DISCRIMI-NATING UNIT
518b
511c
504b
513b
30
518a
515b
512g
511f
515a
512f
511e
512e
REJECT BOX
517b
517a
901a
ACCEPTING BOX 1
903b
901b
903a
902a

FIG.33

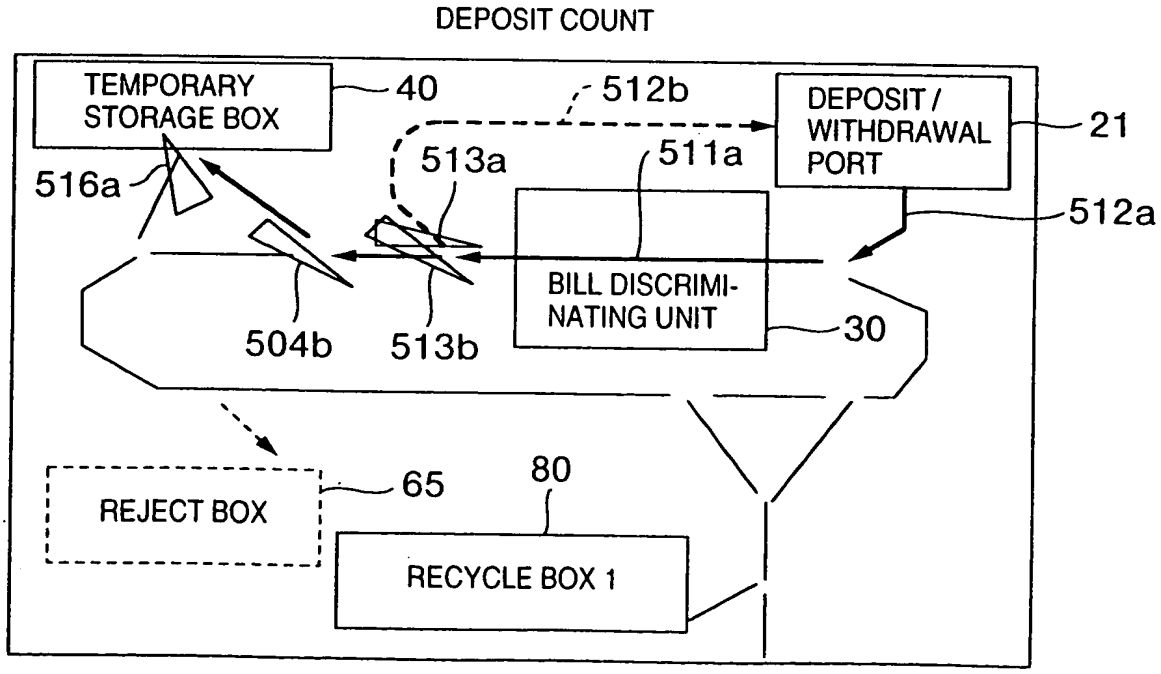

DEPOSIT COUNT
TEMPORARY STORAGE BOX
40
512b
DEPOSIT / WITHDRAWAL PORT
21
513a
511a
516a
512a
BILL DISCRIMI-NATING UNIT
504b
513b
30
65
80
REJECT BOX
RECYCLE BOX 1

FIG.34

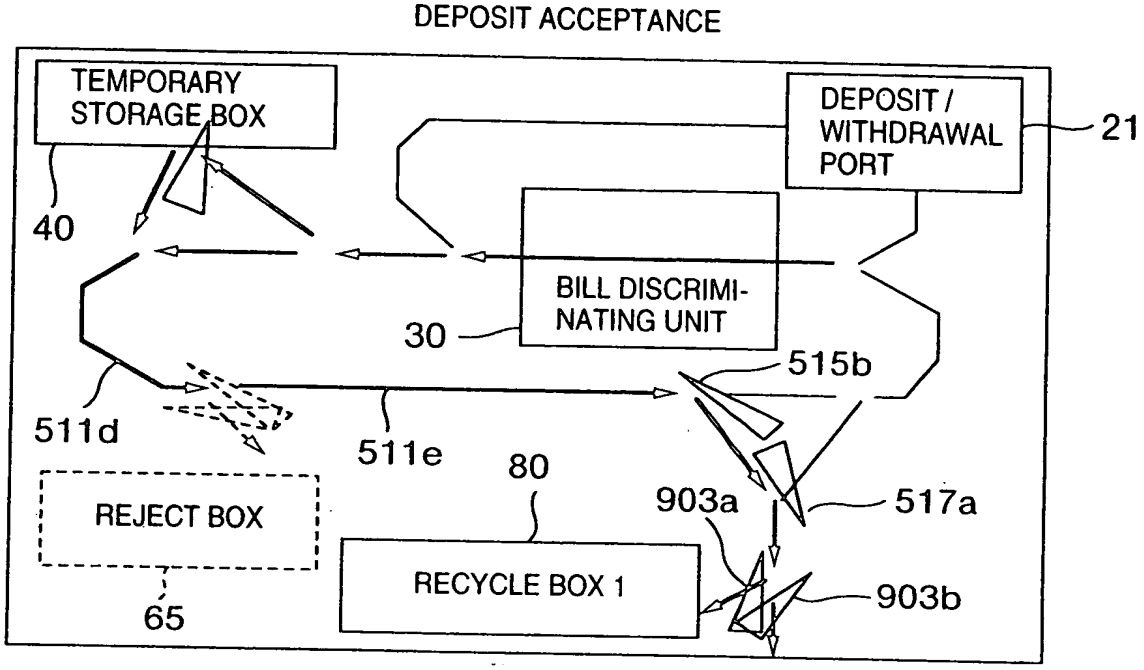

DEPOSIT ACCEPTANCE
TEMPORARY STORAGE BOX
DEPOSIT / WITHDRAWAL PORT
21
40
BILL DISCRIMI-NATING UNIT
30
515b
511d
511e
80
903a
517a
REJECT BOX
RECYCLE BOX 1
903b
65

FIG.35

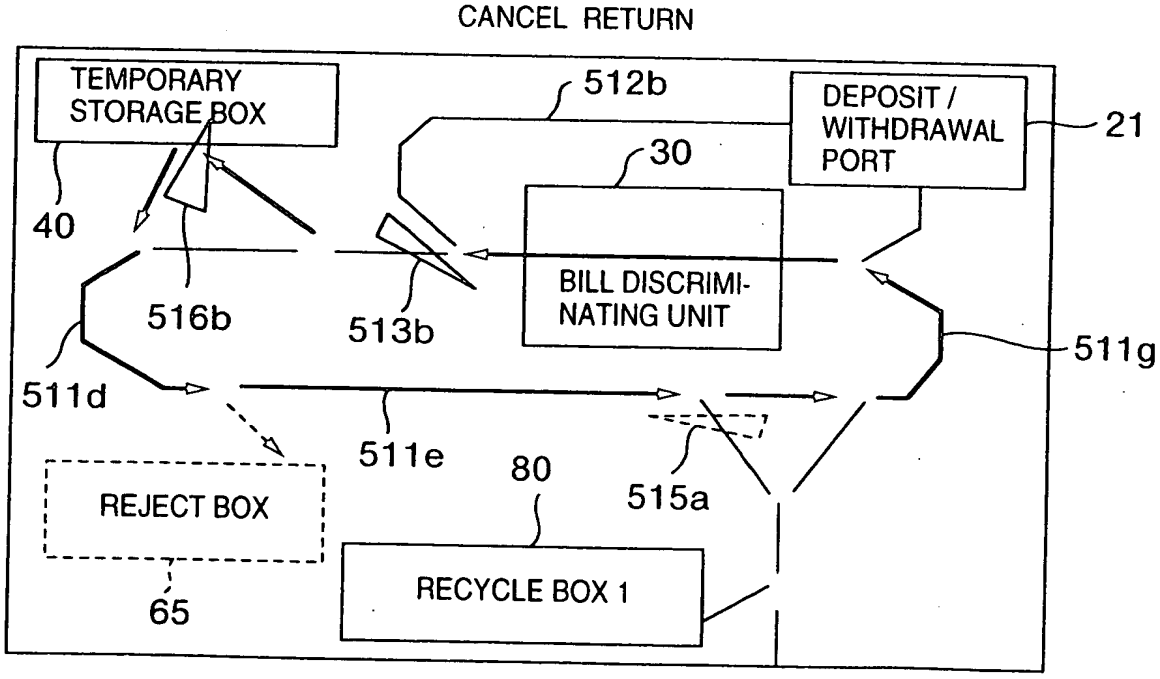

CANCEL RETURN
TEMPORARY STORAGE BOX
512b
DEPOSIT / WITHDRAWAL PORT
21
30
40
BILL DISCRIMI-NATING UNIT
516b
513b
511g
511d
511e
80
515a
REJECT BOX
RECYCLE BOX 1
65

FIG.36

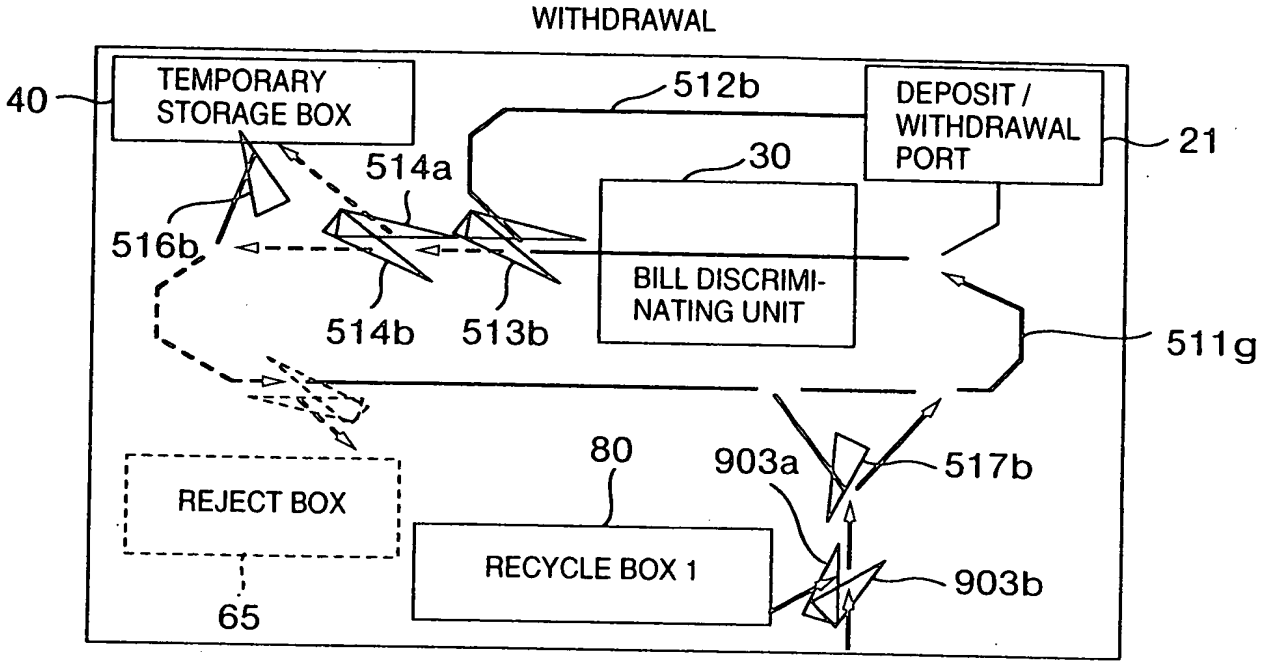

WITHDRAWAL
40
TEMPORARY STORAGE BOX
512b
DEPOSIT / WITHDRAWAL PORT
21
514a
30
516b
BILL DISCRIMI-NATING UNIT
514b
513b
511g
80
903a
517b
REJECT BOX
RECYCLE BOX 1
903b
65

FIG.37

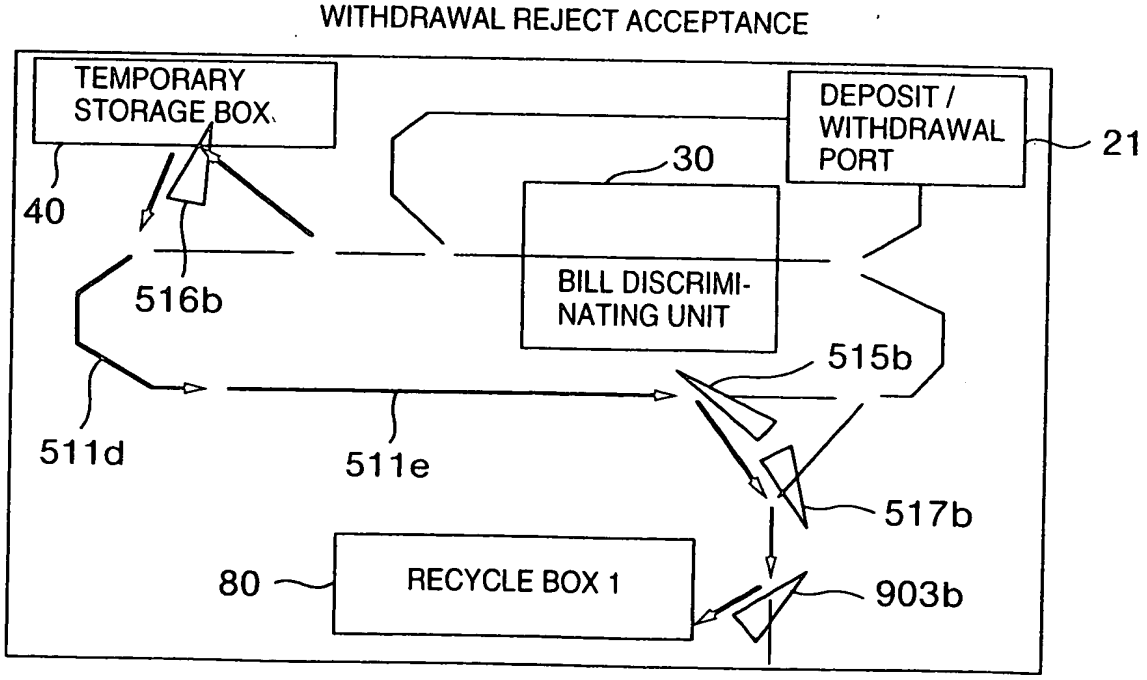

WITHDRAWAL REJECT ACCEPTANCE
TEMPORARY STORAGE BOX
DEPOSIT / WITHDRAWAL PORT
21
30
40
516b
BILL DISCRIMI-NATING UNIT
515b
511d
511e
517b
80
RECYCLE BOX 1
903b

FIG.38

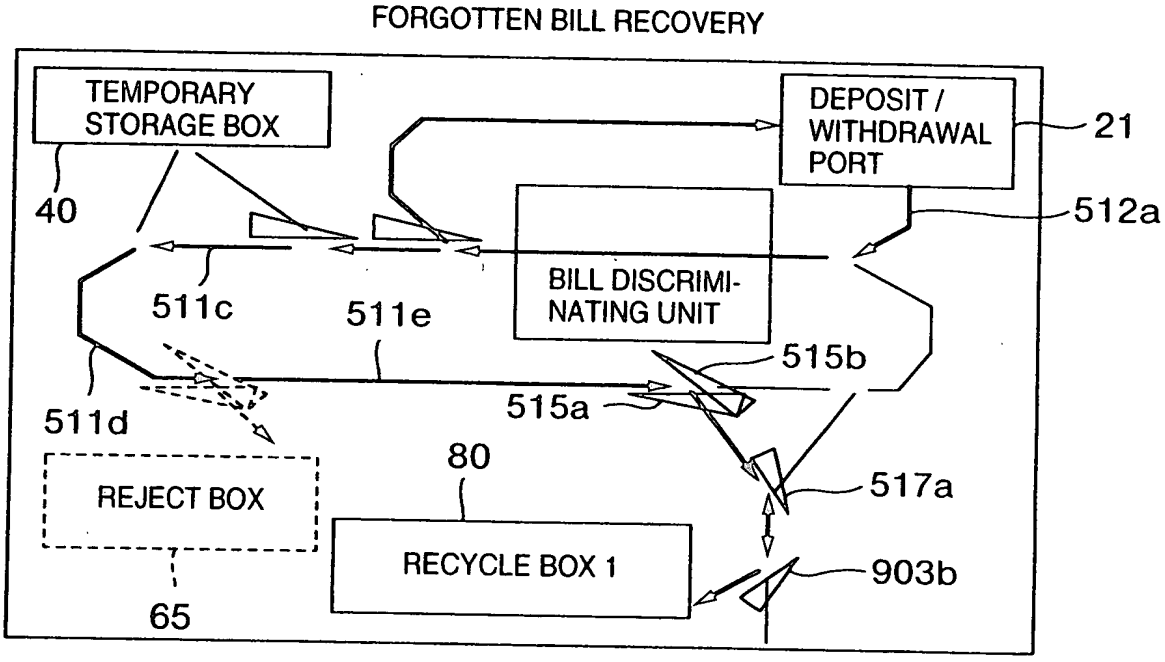

FORGOTTEN BILL RECOVERY
TEMPORARY STORAGE BOX
DEPOSIT / WITHDRAWAL PORT
21
40
512a
BILL DISCRIMI-NATING UNIT
511c
511e
515b
515a
511d
80
517a
REJECT BOX
RECYCLE BOX 1
903b
65

FIG.39

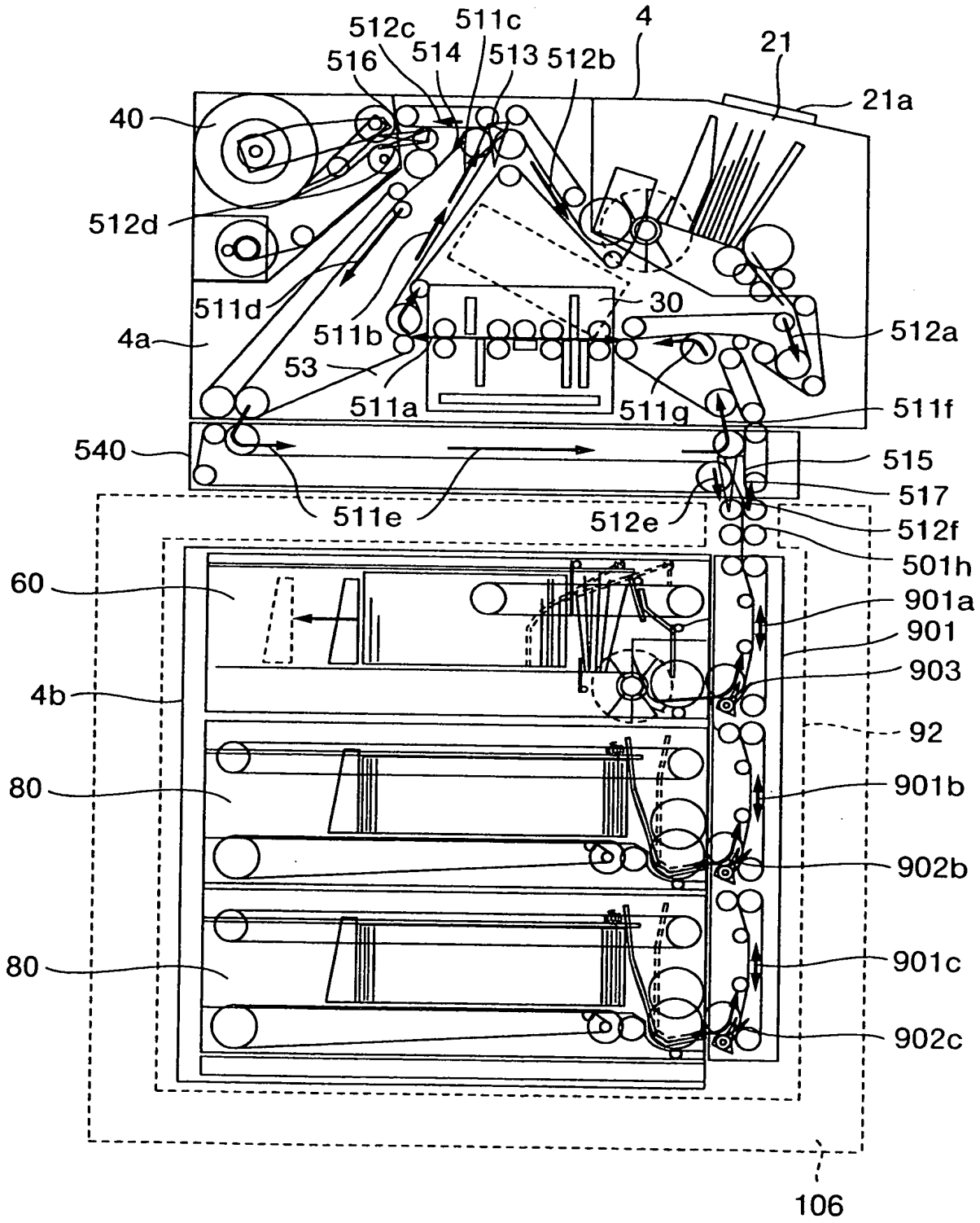
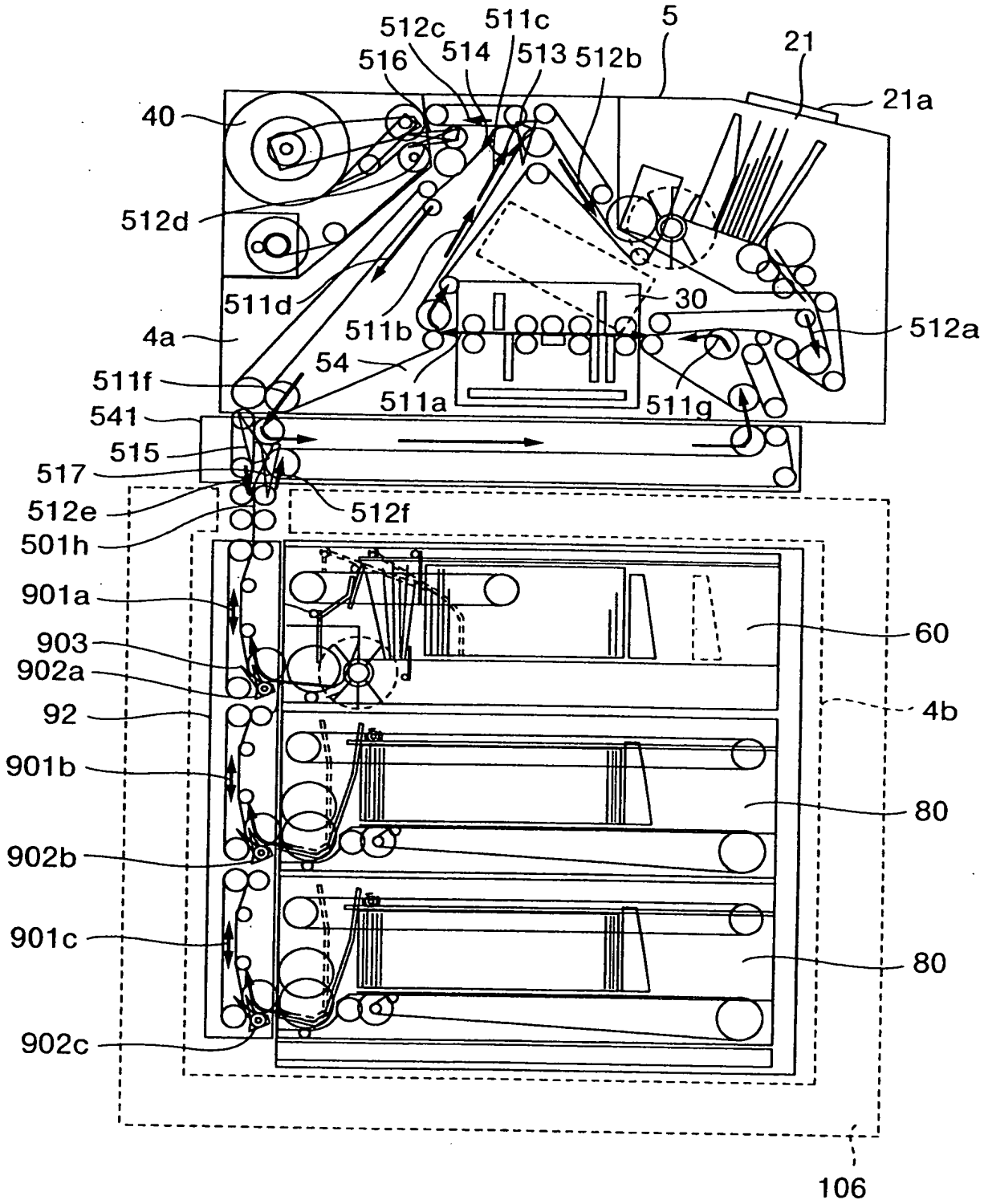

512c
511c
4
516
514
513
512b
21
21a
40
512d
511d
30
4a
511b
512a
53
511a
511g
511f
540
515
517
511e
512e
512f
501h
60
901a
901
4b
903
92
80
901b
902b
80
901c
902c
106

FIG.40


512c
511c
5
516
514
513
512b
21
21a
40
512d
511d
30
4a
511b
512a
54
511f
511a
511g
541
515
517
512e
512f
501h
901a
903
902a
92
901b
902b
901c
902c
60
4b
80
80
106